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LECTURES
ON
AMPUTATION,
AND ON THE
Nature, Progress, and Terminations of the Injuries for which it is required.

(Delivered at Sydenham Coll. Med. School.)

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LECTURE XVI.

Observations on the effects of a shock to the system from severe injuries and operations, continued. 1. Death without the development of febrile action. 2. Tetanus. Observations on Secondary Hæmorrhage, Hospital Gangrene, Mortification, spontaneous and traumatic, and on Exfoliation.

All impressions made upon the nervous system, whether the agent take effect on the mind or the body first, are capable of acting as stimulants; and the same impressions, in an increased degree, will as certainly act as sedatives: in other words, they impair the nervous power without previous excitement. All sudden and violent impressions have a strong tendency to produce a sedative effect; yet, if even a violent impression be very gradually induced, it is more likely to act as a stimulant: the sedative effect will be in proportion, therefore, to the suddenness of the shock, and the deficiency of vigour in the system. Thus the pain and shock of an operation on robust frames will often act as a powerful stimulant; while on a debilitated subject it acts as a fatal sedative, without any previous excitement.

In reference to the shock of an injury or operation, however, there seems to be, two states of the system but ill-adapted to resist its deleterious effects, when that shock is violent; these states are most diametrically opposed—the two extremes, in fine; for in the physical world as in the moral, they often meet. 1st. In persons of nervo-sanguineous habit, plethoric and in rude health. 2nd. In patients exhausted by the effects of a previous shock, followed by the hectic state, accompanying a wasting discharge and continued irritation. These are the two conditions in which patients are most liable to the fatal sedative action resulting from shock.

Thus it is that after every severe injury to the human frame (therefore necessarily after every amputation or capital operation), there is a disposition in the system to develop febrile action, unless the shock be so severe as to annihilate all power, and induce a state of total prostration and collapse, from which the patient never rallies.

This febrile action varies much in character, and is modified by the severity of the injury, the state of the system, the temperament of the patient, and the favourable nature, or the reverse, of the external circumstances by which he is surrounded. In the preceding lectures, two of the principal forms of fever supervening in cases of severe injury and in amputations have been described, together with certain peculiar complications, such as purulent depôts in vital organs, or distant parts of the extremities, affections of the viscera, &c.

The two forms of fever to which I allude, the Irritative and the Bilio-remittent, together with the complications enumerated, I have traced, I think unequivocally, to the impression made upon the nervous centres in the first instance, and the vitiated quality of the circulating fluid which often results. In these cases death may result, but it is always preceded by febrile action.

Death, however, not unfrequently, in extreme cases, results from the shock, in a different mode. 1st. By the immediate sedative effect upon the nervous centres generally, destroying their power, and life itself, so rapidly as to preclude the possibility of any febrile action supervening. 2nd. By making a morbid and stimulant impression upon the true spinal centre, and developing tetanus in its most frightful forms.

Upon what these very different modes of action depend, by which the patient's life is lost, all arising from an apparently similar injury, I will not at present detain you by attempting to determine. Why the chief effect should appear in one instance to fall upon the sanguiferous system and its nervous power, occasionally involving, in a distinctive inflammatory or suppurative action, the structure

and tissues of vital organs; at other times falling upon the whole of the nervous centres, or again upon only one division or system; the true spinal, for instance, inducing tetanus; is more, probably, than can be satisfactorily explained in the present state of our physiological knowledge. My present object is merely to show the connection between the four chief modes of development, and their common relation to the one pervading cause, shock or commotion to the nervous centres, inflicted by a sudden injury, or the operation of amputation.

In the two effects of the shock more particularly under consideration, patients are liable to be carried off in a few hours; occasionally they fall at once into a state of stupor and collapse, from which they never rally: while in other cases a kind of sickly struggle is kept up for two or three or more days, at the end of which period the patient sinks irretrievably.

Of this latter kind, I have before me in the abstract of cases in my own practice more than one example. In one, a case of secondary amputation, the patient died on the second day; and it is remarkable that, notwithstanding such a prompt and fatal result, the patient bore the operation well, and its exhausting and sedative effects did not become apparent for some hours.

A second, on the contrary, bore the operation ill, yet did not die until the fifth day. Shortly after amputation his state improved, and he seemed to rally. On the fifth day, however, the cerebral system became involved, and he sank very rapidly.

It is impossible, in the first instance, to predict with any certainty, under similar circumstances, whether patients will perish by the shock, or which among a certain number will be those who survive. It is not always the patients apparently the most exhausted, or who have laboured under the most diseased local actions, that are swept away.

Two cases are present to my memory strongly illustrating the truth of this assertion. Both were fractures of the femur: one died within twenty-four hours by the direct and sedative action of the shock of the operation; the other was a case of amputation for fractured femur also, but performed for the rupture of the femoral artery by a projecting sharp end of the broken shaft during treatment; and although he sank at first to an alarming degree, he rallied promptly, and was cured on the sixty-third day. Here the parts divided by the knife were much diseased, the patient suffered the additional shock of a considerable loss of blood, and the terror to which such an accident invariably gives rise.

In reference to this cause of death there is little further to remark. Of the second class of effects of shock upon the nervous centres—tetanus, I am unwilling to add a mass of details, the application or utility of which I cannot myself see. I have observed tetanus occur from slight and apparently simple flesh-wounds, yet the most complicated cases are in a very large proportion exempt. We are warranted, therefore, in the conclusion, that the supervention of this morbid action has no direct relation to *the severity of the injury*. Tetanus does not supervene so frequently on amputations as on cases of injury treated with a view to save the limb: yet I believe that the nature of the wound has little influence compared with the temperament of the patient, and probably some peculiar state of the system at the time the injury is received: possibly the state of the atmosphere and its temperature may also be taken into account, sultry weather, apparently, favouring the development of this affection.

In reference to treatment, neither bleeding nor amputation, I have assured myself, will arrest its action when once fairly established, although a slight and temporary relief is occasionally the result. The system is rendered in a great manner insensible to the influence of ordinary narcotics. I have given three-grain doses of morphine every two hours with very slight effect. It is true I have seen patients recover; and it has been the custom on such occasions to attribute the fortunate result to whatever treatment might have happened to be adopted. Thus one of the patients recovered under full doses of carbonate of iron; but in others it has seemed to possess no virtue whatever. I have been unable to trace any lesion or physical change in the structure of the spinal marrow or brain to account for the effects, and only in one instance any signal disease in connection, and that was purulent and suppurative disease in the viscera: not however depending upon each other, I conceive, but upon a first cause—the shock to the system. The periods of attack in injuries leading to *amputation*, in four instances in which I tried its effect, were the seventh, eighth, tenth, and fifteenth days; and in the only instance, in more than fifty cases, where it supervened on primary amputation, it appeared on the twelfth day.

These are all the supervening actions which I think may be tolerably directly traced to one and the same source—the shock or commotion received by the nervous system, and the consequent altered properties and vitiation of the circulating fluid due to its deleterious action.

Hectic fever, Secondary Hæmorrhage, Hospital Gangrene, and Mortification, are the only actions of importance which now remain for consideration.

Hectic is rarely a cause of death in primary or intermediary amputations; it is common in fractures treated, and in secondary amputations. It is remarkable, however, that of all the supervening actions on injuries it seems the most easily arrested by amputa-

tion; and unless the exhaustion of the patient is so great as to offer no hope of his surviving the shock of an operation, it is never in itself a sufficient ground for resigning a patient to its slow and certain progress without such an effort at rescue. Diarrhœa is its most frequent complication, depending, I am inclined to believe, upon the relaxed state of the capillaries, found by experiment to be induced by deficient or exhausted nervous power: rarely, therefore, is there any change of structure in the mucous membrane of the intestines. Of the other diseases found grouped with hectic, Gangrene and Sloughing, from a want of vitality in parts subjected t ‹pressure, is the most common, as in the bed sores of the back; gangrene from inflammation and suppurative disease, as in the wounded limb, occurs less frequently. The occasional development of phthisis in those predisposed, and (though much more rarely) phlebitis, of which I have seen but one example, form the whole of the complication or attending diseases usually noticed with hectic.

Gangrene simply, hospital gangrene, erysipelas, hæmorrhage, complicated wounds, may all be included in a chapter of accidents. On hospital gangrene, so much has already been written, that unless I felt I had something new and valuable to offer, there can be little excuse for dwelling upon it in these lectures. Of hospital gangrene, and of spontaneous mortification and gangrene arising in the foot and leg, and subsequently affecting the stump, I had in Oporto and in Vittoria, unfortunately ample experience. But as there is no specific treatment for either the one or the other, and circumstances must so much modify the application of any principles laid down, I do not think it necessary to enter into any detail.

With respect to the question of amputation, however, there are some points of interest on which new facts are of importance.

Baron Larrey has already, I think, sufficiently demonstrated the propriety in *traumatic gangrene* of amputation above the injury *without waiting for the line of separation being formed*, if the state of the patient in other respects does not forbid operation. When mortification has once declared (in the case of a severe injury), it arises in all probability *not from any want of vital power in the system*, but from the congested state and impeded circulation of the parts below, probably promoted, if not in many instances induced, by deficient nervous influence in those parts, deeply impairing the vitality of the whole of the tissues;—or from an inflammation so violent in the parts immediately surrounding the injury, as to destroy the vitality of all the tissues by excessive action. This, then, as the result of a specific local and circumscribed action, destroys the parts involved, beyond the possibility of repair. Nature immediately proceeds, by a process of absorption upon the living portion of the limb, to detach the dead parts; but this is a work of time, exhausting the system and injuring its healthy and vital powers. To save this idle waste is the true object of the surgeon, who removes, in a few seconds, with the knife and saw; that which otherwise, it would require weeks or months to separate, leaving a bad stump after all, even if the patient survived all the waste and irritation of the long-protracted process. It is quite true that a severe shock is inflicted by the operation, and that the patient, with previously impaired strength, may sink from it; but without this summary measure, how many more would die? We must bear in mind, also, that which Itrust has been amply demonstrated in these lectures, viz., that a man *is by no means necessarily* in a worse state for amputation, who may have already undergone some previous sickness. Here are abstracts of two fatal cases, which show that we shall not, indeed, always succeed in saving life by prompt amputation; yet, notwithstanding these occasional adverse results, there can be no doubt that the chances of recovery are much improved by surgically cutting short a doubtful and wasting struggle on the part of nature to throw off the dead mass.

The first case was one of peculiar interest to me; it occurred at the commencement of my career in the Peninsula, after a desperately-fought action, which crowded every public building in the city of Oporto with wounded. I found many of the British scattered in various Portuguese hospitals, and the patient in question was one of these; a musket-shot had entered over the forearm, and, coursing upwards, bruised and destroyed the vessels of the arm, emerging near the armpit. I say it was of peculiar interest, for had I erred in judgment, comparatively young and untried as I then was, I should have lost the confidence of those who gave me such responsible duties. I did not find this man until the second day after the action; his arm was in process of mortification below the wound: the diagnosis to me was so obvious, that I at once decided on amputation; and, as a matter of courtesy, communicated with the Portuguese surgeon-in-chief of the hospital, who, pointing to the ecchymosed and discoloured state of the integument of the thorax opposite to the exit of the ball, shook his head, and assured me that it indicated a want of vitality in the whole system, and commencing mortification beyond the wound. I felt authorised in strongly insisting on a different view of the case, and I found, at the hour I had fixed for operation, a considerable number of the Portuguese medical staff assembled to test my accuracy, or bear witness to my error. The operation satisfactorily proved that there was no mortification at the shoulder; and on the first dressing, three days after the operation, there was almost entire union of the stump; the healthy adhesive process left nothing to desire: a few days later an irritative fever de-

veloped itself; the stump opened out, and he died. The unfavourable progress of this case I attribute almost exclusively to the unfavourable circumstances in which the patient was placed; intense summer heat prevailed while in the crowded Portuguese hospital, there was bad ventilation, and worse attendance.

In the second case there did exist, apparently, some deficiency of vital power generally, both at the time of operation and subsequently in the action of the stump, to which may be attributed the fatal result. It must be remarked, however, that no gangrenous or sloughing action supervened in either of the stumps, and as both proved fatal cases, this fact may be taken as a fair proof that there is little danger of such a result.

Case of amputation at intermediate period (10th day) for traumatic gangrene of foot, in a case of compound fracture of tibia and fibula; patient died two days after operation; performed by circular incision; external circumstances unfavourable; middle age.

H. Bull, October 23, 1832. First day after injury. Leg much swelled. 4th day. Leg, foot, and ankle continues much swelled, and several large, dusky-coloured blisters appear; temperature of limb a little more than natural. 5th. Whole of the foot and ankle and lower third of leg is of a dusky livid hue; toes cold; lower part of foot retains its increased temperature; there is also a *bluish, unhealthy* tint in face; pulse regular, full, and slightly accelerated; tongue clean; bowels confined. 6th. Whole of the foot cold and livid; he was delirious at night. 8th. Mortification still not extended as high as the wound; he is free from pain, and action above the wound seems to promise a line of separation; pulse thrills, but is regular; bowels open; says he has appetite; tongue clean; sensorium; less affected. 9th. Strength keeps up; little change in foot. 10th. Amputated. 11th. Passed a good night; pulse quick. 12th. Full accelerated pulse, after restless night; complains of no pain; suppuration copious; Venesection. Evening. Pulse still full; restless. 13th. Pulse more soft and natural; discharge from stump not healthy; no adhesive action; died.

In the successful cases which have occurred in my own practice, or under my observation, there is little worthy of remark, save that almost immediately after the removal of the mortified limb an abatement of febrile action and irritability may be noticed, and the certain and rapid amelioration of all the patients' symptoms is the result.

It is a different question how far it may be sound surgery to remove a limb in cases of spontaneous gangrene, before nature has herself fixed the limits to which that action shall extend. Where an obvious cause, such as a contused and fractured limb, exists, we may safely take it for granted that the action has for its object to separate the limb below its incurable wound, and no more, the cause and the effect are equally obvious. But when an action arises spontaneously, apparently from constitutional rather than local influences, the cause and the object are alike uncertain and undefined. When a foot begins to mortify under such circumstances, or both feet, as happens in a very large proportion of such cases, the patient either knows not how it came, or traces it to some night when exposed to the cold; or some time when, being cold, he held them to the fire: here would seem a local cause, but evidently a very insufficient one, if there were not something vitally wrong in the system. In such cases a local and a general cause, neither of them very certain or defined, are in presence; moreover, a mechanical cause, the result of a general morbid action, may exist, such as the thickening or narrowing and obliteration of the arteries, commencing either in the trunks or the capillaries: and if in the former, to what point does it extend—what means have we of determining? If from some general cause of adynamic character, will the mechanical removal of the foot prevent its action on the leg above? The impossibility of answering these queries, important in every sense, has led to the principle of practice, that under such circumstances amputation is inadmissible until nature has commenced detaching the dead from the living, by forming a line of demarcation and separation.

The principle is a sound one, as a general rule; and in the large number of cases presented to my notice in Estremadura and Lisbon, and later at Vittoria, it was acted upon. Nevertheless, there are circumstances in which it may be departed from, to the great advantage of the patient, and where death would in all probability ensue, if an apparently more safe, but in reality only a more timid and less judicious practice were followed. When the extremity of a limb is involved in mortification, without sufficient or apparent local cause, it is our duty to wait for a line of demarcation, while it gradually rises to the joint *next to the one uniting it to the trunk*. But having passed that, particularly after having remained for a longer or shorter period *stationary*, and if it still proceed, threatening speedily to involve the last articulation, and ultimately the trunk itself, what hope is left of life?

The experiments of Le Gallois and Dr. Wilson Philip have sufficiently demonstrated that when the action of the heart and blood-vessels is impaired by an impression made upon the nervous centres, so as to be unequal to the effort of continuing the circulation through the body, we may, by ligatures cutting off the supply of blood to the extremities, enable the sanguiferous system to carry on the circulation in the more limited circle of the head and trunk with sufficient vigour.

The heart, under such circumstances, recovered its power, contracting and dilating with renewed force.

By removing a limb in which mortification has already begun at the more remote extremity, and to which nature is in vain making an exhausting effort to send more blood, and to permeate parts no longer capable of receiving it, we not only gain the result obtained in the experiments by cutting off the supply to the extremities, but we relieve the system of the gangrenous action, and its sedative influence upon all the vital functions. It is easy to perceive, therefore, how the power of the nervous system generally, and of the heart and blood-vessels, may be improved by the] amputation of a gangrened limb, and thus become fully adequate to the healing of the stump, although before unequal to the action necessary to separate the dead parts from the living.

In a case which came under my care at Lisbon, in the year 1834, I operated upon this principle;—once more, in direct opposition to some of my Portuguese colleagues. The facts were briefly these:—A drummer-boy, aged seventeen, arrived at the hospital, from the outposts at Cartaxo, near Santarem, with a gangrened foot. He stated himself to be healthy, but was not a very robust-looking boy. He had neither received any injury, been the subject of fever, nor exposed to cold in any way. The gangrene for some days was stationary, with a very distinct line of demarcation (by altered colour) half way up the leg. In three days gangrene again commenced, by a dark circumscribed spot on the knee. I had purposed amputating a day or two before, in the belief that nature was unequal to the process of separation, but had deferred in compliance with the strong dissident opinion of all my colleagues, and the Portuguese director of the chief military hospital at Lisbon. In accordance with the principle already laid down, that when the gangrene extends beyond the joint leading to the trunk, amputation offers the best chance of life, if the system still retain considerable power; I hesitated no longer, but removed the limb midway in the thigh. Scarcely any arterial blood escaped, and the femoral artery was deeply retracted, and showed no disposition to bleed. On examining the artery in the leg at the amputated surface, I found its coats considerably thickened, and greatly diminished in calibre. One of the smaller vessels was secured; no ligature was placed upon the femoral; a tourniquet of precaution was applied, and he was carefully watched. As I had predicted, no tendency to secondary hæmorrhage was shown. Dressings were not even stained with blood: the case went on most favourably. There seemed at first a slight deficiency of action; for although the edges remained exactly in contact, the corners only had united. His health and appetite, however, both continued good, and his pulse soon indicated the increased vigour of the circulation. The cause of gangrene thus seemed to have been a thickening of the coats of the popliteal artery, and final obliteration of the canal; thus cutting off the chief supply of blood to the foot: the deficiency of power to throw off the dead portion is attributable, therefore, in a great degree, to the insufficient supply of blood to the living parts immediately above the dead parts, added to the sedative effect of the gangrenous action upon the system; and the longer the state was allowed to exist, the less capable of any efficient action must the system have become. On what general morbid action this thickening of the coats and diminution of the calibre of the chief trunk was dependent, and why it should exist in one lower extremity and not in the other, are questions difficult of solution, and somewhat foreign to the more immediate object of this lecture. Whatever may have been the first cause, it certainly did not proceed further, or recommence and lead to the gangrene of the stump.

Secondary hæmorrhage is a more frequent cause of amputation than of death. It occurs less frequently during the treatment of complicated injuries than after amputation has been performed; and in amputations it occurs most rarely after the primary.

In 38 deaths which occurred during the treatment of 153 cases recorded in Tables I. and II.,* secondary hæmorrhage contributed to the result in two only.

In 27 intermediary amputations,† secondary hæmorrhage was the cause of amputation in four cases: and in 25 secondary amputations, three were performed for the same cause. Thus, in 205 cases, nine occurred either causing death, or leading to amputation, and its chances of fatal result, the proportion being 1 in 22.7.

In reference to the occurrence of secondary hæmorrhage after amputation, when it takes place to any extent after the first twenty-four hours, the case generally proves fatal; not so much by the loss of blood frequently, as by the irritation of opening out a tender and partially-united stump; and the mental shock induced by the terror of the patient, generally increased by the alarm of the attendants.

This is an important fact; since it should impress upon your minds the necessity of taking every precaution, when putting up the stump, to guard against such a dangerous occurrence. To this subject I shall recur in the next lecture, when speaking of the first dressing after treatment of amputations.

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* See LANCET, page 397, 398, vol. i., 1840-41.

† Ibid., page 433, 434, vol. i., 1840-41.

In 57 cases of primary amputation, secondary hæmorrhage supervened in ..	9 cases,	1 in 6.3.
In 27 intermediary, it occurred in	5	1 in 5.4.
In 25 secondary.....	6	1 in 4.1.
109 amputations..	20	1 in 5.4.

Yet in 55 fatal cases, in 5 only, or 1 in 11, was the secondary hæmorrhage a prominent cause of fatal result; 1 primary, 2 intermediate, and 2 secondary: and in 4 other cases, 3 secondary and 1 intermediary, its influence was not of so decided a character, although the hæmorrhage probably materially contributed to the unfavourable issue. We see, therefore, that the serious cases of secondary hæmorrhage are in proportional frequency of occurrence, in reference to the primary, intermediary, and secondary amputations, as 1 in 57, 9—5; the cases in intermediary being more than six times the number of those in primary; and in secondary, more than double those of the intermediary.

There are many points of interest connected with the study of these cases in detail, which I cannot, however, attempt to develop at any length here. The average period of supervention in these cases of secondary hæmorrhage, is from four to five days. Three occurred in the first day, a few hours after operation; all for branches of the brachial, and one for both trunk and branch. Three took place from the femoral artery, and in two the artery was unavailingly secured above. One from a branch of the profunda, secured on the face of a sloughing stump, by means of two needles and a twisted suture. Hæmorrhage from branches is in some degree more frequent than from the trunks. Sloughing stump, generally, or the same action limited to the artery, proves to be a very general cause. In three of the cases occurring in my own practice, the total absence of all adhesive inflammation in secondary and intermediary amputations was the more obvious cause. In one there was only a partial plug of fibrin. From these, and other facts which have been presented to my notice, I conclude—

First. That hæmorrhages, within twenty-four hours of amputation, are almost invariably from the branches, and not generally from any diseased action in the vessels, but from their not having been secured before the stump was put up.

Secondly. After this period to the tenth or twelfth day, within which the worst cases almost invariably occur after amputation, secondary hæmorrhage generally supervenes, from one of two causes: either a general sloughing action on the tissues of the stump, involving the arteries (occasionally almost exclusively confined to the coats and sheath of the arteries), or a less obvious diseased action, the chief effect of which is to prevent the formation of a plug of fibrin and the obliteration of the artery by adhesive inflammation. In these latter cases, both trunk and branches are generally open-mouthed; and there is little ground for hope that the ligature of the artery above the stump will be of permanent service.

Thirdly. Whenever secondary hæmorrhage becomes a cause of amputation, the chances of a fatal result to the patient from the operation are greatly increased. There is always loss of blood, more or less, before amputation. There is always in addition to the shock of the operation a moral shock from alarm, and the unavoidably sudden announcement of the necessity of removing a limb, which the patient had hoped to preserve, and of inflicting a degree of bodily pain from which his nature instinctively shrinks. These impressions, physical and moral, are, in the highest degree, prejudicial and deleterious in their action.

In stumps, then, secondary hæmorrhage usually occurs, as you have seen, either from small vessels having escaped ligature, and subsequently throwing out blood, by a sloughing or ulcerative action in the arteries; or, finally, from the total absence of all adhesive inflammation in the trunk of a divided artery, when we find the ligature lying loose, and the open mouth of the artery exposed. But in complicated injuries under treatment, secondary hæmorrhage frequently occurs by the mere separation of eschars and sloughs, caused by the bruising or injury to the artery in the first instance; the separation of such dead parts, so far from being the result of disease, is effected by a healthy process; or at other times by the separation of sloughs, which, previous to the suppurative stage, had assisted in closing a partially-ruptured vessel; or, finally, by spicula of fractured bone forcing their way through the coats of an artery, or by pressure exciting an ulcerative action.

In complicated injuries, for some time under treatment, such is the state of disease in all surrounding parts, that many difficulties oppose, and sometimes successfully, the best line of practice; viz., the ligature of the artery at the point injured; but two resources then remain, to tie the artery above the wound, which in the arm is perfectly useless, although it occasionally succeeds in the lower extremity when the artery injured is the peroneal, posterior, or anterior tibial, or that which is most generally the one we are compelled to adopt—amputation. Here, as I have pointed out, besides the loss of blood, the anxiety, and moral shock, there is the shock of the amputation, and rarely a healthy action of stump ensues, while not unfrequently in consequence of this there is again secondary hæmorrhage.

In bleeding from a stump, if it occur soon after amputation, the wound must be opened and cleansed, and the bleeding point secured.

If, however, the bleeding happens at a later period, the face of the stump much diseased and sloughy, the attempt to take up the artery, particularly if a branch, rarely succeeds. I have found it effectual, and occasionally when all other methods have failed, to include between two curved needles a portion of the surrounding parts, and wind a ligature under them, subsequently, with the bone-nippers or cutting-plyers, removing the points, and any superfluous length. The case I related, in illustration of the second class of irritative fevers in a former lecture, is one where this method succeeded, and the patient's life was saved.*

Among the causes of amputation in complicated injuries, as well as one of the supervening actions after operation, extensive periosteal disease ought not to be omitted: although it does not figure very frequently as the obvious cause of amputation, yet from some well-marked cases which have come under my notice, I am inclined to think that the extensive suppurative and disorganising disease which ultimately renders any attempt to save a limb hopeless, may take its origin from periosteal disease in the first instance.

More importance is to be attached to the action the periosteum may take on, both in cases of injury under treatment and subsequent to amputation, than is usual. My attention was first directed to this subject by the frequent and often very tedious exfoliations which took place in amputations,—many of these operations performed by myself, and with great and especial care in reference to this point. I was convinced at last that no care or precaution in amputation sufficed to prevent this troublesome result, and it ultimately became evident that the violence inflicted on the bone and its two membranes by the saw was one principal cause. Some inflammatory action of both the membranes and a disposition in the immediate extremity of the bone to slough off, if I may so define it, where it had been in contact with the saw, was very constant; the vessels at their divided extremities not affording nutrition, and active only a short distance above. I very carefully examined and preserved the sawn extremities of the bones in a great number of fatal cases of amputation, and I fully satisfied myself on some points of importance in reference to the nature and causes of exfoliation. To these I can only at present glance in general terms. The separation of a rim of the sawn extremity either in a piece or by minute particles, and consequently unobserved, I believe to take place in *all* amputated limbs. Whether it be a large or a small piece, whether it involve only the extremity or the whole shaft, will, I believe, be found to depend upon many causes, the state of local disease existing or supervening in the stump or extremity, the general health and susceptibility to morbid action of the medullary or periosteal membrane, &c., contributing to the result.

In some there is great exfoliation carried forward by a long and tedious process; in others, again, contrary to all anticipation, no palpable exfoliation takes place, although disease may have already denuded the bone in some degree previous to amputation. One such case came under my observation, proving this fact in a most remarkable manner. This action, therefore, would seem to depend more upon the state of the system, and a general susceptibility to morbid action, than upon the state of parts in the vicinity of the amputation.

In a case of shattered carpus an extraordinary want of sympathy was manifest in the system, and comparatively little pain suffered either before or after amputation. Exfoliation took place not the less.

I am led to believe, therefore, that under any circumstances some exfoliation may be expected, depending, in a great measure, upon the injury inflicted upon the sawn surface of the bone, depriving the vessels at their divided extremity of vitality.

This is a subject essentially connected with the pathology of bone of great interest, and well deserving careful study. I must limit myself, however, to a very few observations on the stages and progress of these actions.

In all sawn bones there is at the extremity an absorbent process set up, the object of which is to round the sharp edges, and remove the flat and injured surface. Under the most favourable circumstances the absorbent process removes but particles at a time, while the deposit of callus is proceeding; but at other times, and without any very obvious reason, nature immediately sets to work to cast a line of demarcation round the edge, so as to cast off a complete rim, extending higher or lower, and then very frequently we find coexistent an irregular and morbid deposit of callus, not round the end merely, but extending upwards where it is not required. The periosteum takes on a morbid action, with which not seldom the medullary membrane sympathises, absorbing the inner shell. If this state proceeds far, then we have extensive necrosis: the case which I have already given,* is one of the best examples I have met with.

I only find any distinct reference to exfoliation in about one-fifth of the cases amputated, including several in which the process was found after death to have been going on, although not completed. It is probable, however, that this action existed in many more, particularly fatal cases, although no special notice was taken of the circumstance. From a careful study of all the facts which have come under my observation, in reference to the pathology of the osseous tissue,

* See Case VI., vol. ii., p. 500.

* See Case VI., vol. ii., p. 500.

and more expecially the actions on which exfoliation depends after amputation, I have drawn the following conclusions.

1. The proneness to diseased action in the lining and investing membranes of the bone may fairly be considered as one of the causes of danger in amputation. This action commences at the sawn extremity; and if it extend far beyond, involving any considerable portion of the bone, it produces an irritative or hectic fever, wearing out the powers of life, and ultimately destroying the patient. One of the most remarkable circumstances attending the development of the exfoliating process is that it will occasionally take place, while the stump in the greater part of its extent is soundly uniting. An example of this I have already brought before you.*

2. It is evident that whatever influence a local disease of the soft parts of the stump may in some cases exercise upon the bone, the process of exfoliation is neither dependent upon nor essentially connected with it. In some cases, where the stump has been firmly and healthily united, I have found exfoliation had been going on. In other cases similarly situated, the bone, on the contrary, has been rounded with callus.† In a third series of cases, although the stump has been three months in healing—long continued disease marking the case—no exfoliation was perceived; nay, even when the parts divided by the knife have been exceedingly diseased, including the periosteum, I have often been unable to detect any process of exfoliation. All these facts tend to prove that exfoliation arising from the necessity of nature's efforts to remove the sharp edges of bone, which would otherwise remain sources of irritation to the soft parts, and to throw off the parts which, by immediate bruising and contact of the saw, lose their vitality, may be effected in two ways. 1. By gradual absorption of minute particles which are conveyed into the circulation and out of the system, with other effete particles separated by the various secretory organs; and, 2ndly, by an absorbent ulcerative process effecting a line of separation, and throwing off larger or smaller portions of the extremity of the bone, as sloughs are separated and thrown off in soft parts. The mode which may be adopted by nature is determined by causes and influences extremely difficult to appreciate, and not clearly referrible either to the state of the surrounding parts, or to any obvious changes in the general health of the patient.

* See Case II., vol. ii., p. 498.
† See Case I., vol. ii., p. 497.

RESEARCHES
INTO
VALVULAR DISEASES OF THE HEART,
IN CONNECTION WITH THE
SOUNDS OF THAT ORGAN;
ILLUSTRATED BY CASES.

By Thomas Moore, Esq., M.R.C.S., late Secretary to the Dublin Medico-Chirurgical Society.

[Read before the Dublin Medico-Chirurgical Society.]

Gentlemen:—Since the publications on diseases of the heart, which, within the last twenty years, have emanated from the press, not only in Great Britain, but also on the continent, little remains for the junior practitioner to do, excepting to compile what has been already written; to translate the works of those whose experience and talented treatises on this branch of the profession have deservedly attained a very high rank in the medical world; or to remain silent, and admire or condemn; praise or dispraise, "in thought's deepest reverie," the labours of those who have had the priority of him; the innumerable theories which have of late distracted his medical brethren; and the host of refutations daily adduced by others opposed to them; each succeeding theory, grounded on some recently-discovered experiment, a repetition of those already performed, viewed in a different light; the adaptation of some newly-invented instruments, or the modification of those already in use; whether established on all these linked together, or any one taken by itself, tends, nay, is always sure, either to differ in some respect from, or upset altogether, the theory or theories which have preceded; and yet the deductions drawn by each and all of those individuals, from the observations they have severally made, seem to them perfectly clear, satisfactory, and such as will set at rest immediately the errors of those who are now mouldering in their graves; the researches of those distinguished alike for their acuteness of observation, as for their unremitting zeal in the investigation of the truths of medicine; the disputes which have arisen; the discussions which have taken place; the labours and opinions, too, not merely of individuals, but even of committees, selected and appointed especially for the purpose; and despite all these exertions, would fain impress on the minds of their readers the necessity of adopting theirs, as the only true and sensible mode of accounting for the occurrence of certain phenomena, to the utter exclusion of all others.

Amidst those perplexities, and the contending opinions of the day, it is with no small degree of reluctance that an essay on

"Valvular diseases of the heart, their complications, and connection with the sounds of this organ," has been composed for this evening's discussion: nor does the writer expect that any remarks of his contained herein will, in the least, influence the ideas entertained by others, respecting the subjects he intends bringing under the society's consideration, but adhering strictly to facts; not drawing conclusions from preconceived notions, but such as must be obvious to, and force themselves upon, every unprejudiced mind, after attentively considering the particulars noted during life, and then examining the appearances which the morbid specimens present, he thus hopes to be able, if not to contradict universally, at least to correct a few of the errors pervading many of those works published on this subject, and to confirm pathologically some of the physiological observations recently made in this city, as well as elsewhere.

It is his determination to proceed at once to the recital of cases which he had an opportunity of witnessing; and instead of recounting upwards of twenty different explanations offered about the sounds of the heart, and the various modes of accounting for abnormal noises, as the latter have been all proved to be erroneous by those authors who have most recently written on diseases of the heart.

Case 1.—Disease of auriculo-ventricular valves, with dilatation and hypertrophy of the cavities. First sound, altered in character, being accompanied by a bruit de soufflet; second sound, unimpaired; aortic and pulmonary valves healthy; also the coats of the arteries.

History.—A shoemaker, twenty-eight years of age, of very intemperate habits, and born of asthmatic parents, when a child was attacked with measles, during which the lungs became seriously engaged; and since then he has been always subject to slight coughs, usually attended with frothy expectoration and shortness of breath. For several years he has experienced little or no inconvenience, till, from repeated attacks of cold, the dyspnœa became more oppressive, being much aggravated towards the approach of damp or foggy weather. About the age of fifteen, whilst engaged in very active exercises, he felt a jumping or fluttering of the heart, which, having continued for several minutes, gradually subsided, and again returned whenever he resorted to the same practice. As he advanced in years, and indulged more freely in the use of ardent spirits, he was more frequently troubled with this complaint, each time in a more serious form, being induced of late by comparatively trivial causes. Five weeks from the period at which this report was taken, he swelled in the feet and ankles, from whence the œdema spread upwards, engaging the legs, thighs, scrotum, and abdomen, producing such an increase in the size and weight of those parts, as to oblige him to relinquish his work.

Symptoms.—His countenance, on admission, was bloated; integuments of face, chest, and back, infiltrated with serum; cheeks, tip of nose, and lips, of a dark red, or livid hue; eyes watery; conjunctiva tinged with yellow; neck short, swollen, and tippet-shaped, particularly on right side; jugular veins much distended, pulsating with strength, and remaining permanently swollen, whether in the erect or recumbent posture; cough husky, and prolonged, worse at night, accompanied with much straining, and a sero-mucous expectoration, streaked with blood, and rusty-coloured particles; sleep interrupted by startings, unpleasant dreams, and feelings of suffocation; appetite good; a greater degree of thirst than natural; tongue clean, and moist.

Physical Signs of Chest and Heart.—The left side of chest is evidently bombé; the motions of both sides, viewed horizontally, do not preserve that uniformity of equable elevation, so well marked in those unaffected by disease; the preponderance of energy being in favour of the right; percussion, generally, clearer than natural, better marked over the left side; the respiratory murmur is exceedingly feeble throughout the entire of left lung, almost inaudible in the supero-anterior portion; in the posterior parts of both lungs, there exists every variety of bronchitic râle; the respiration in right lung is stronger, but, in a great measure, marked throughout its entire extent by wheezing, sonorous, and cooing râles. Over the cardiac region, percussion is more extensively dull than natural, extending higher up, and crossing the mesial line to the right of the sternum: the heart's action is strong, violent, and can be heard along the entire of sternum, over a great portion of the right side, and beneath the clavicles: immediately below left nipple, a very distinct bruit de soufflet is audible by-times, which after continuing three, four, or even more beats, disappears, and is replaced by the two sounds of the heart; after a short interval it reappears, being much increased in intensity by stirring in bed, or any movement calculated to accelerate the circulation; when present, it can only be heard at left side of heart, accompanying the first sound alone, the second being quite free; the action of large and middle-sized arteries is perfectly normal.

When the bruit de soufflet is absent, the first sound is not by any means healthy, being indistinct, not possessing the muscular energy so peculiar to it; pulse 108, occasionally small and weak; frequently full and compressible; but though irregular in strength, yet no well-marked intermission occurs. Respirations 27; laboured. Abdomen swollen, free from pain, affording a sense of fluctuation when tapped; the scrotum is enormously

distended with fluid; the shape of penis altogether destroyed, glistening, semi-transparent, and distended almost to bursting; lower extremities considerably tumefied, tense, firm, and pitting on pressure; bowels confined; urine scanty, and high-coloured. Venesection to twelve ounces. A cough mixture with tartarised antimony to be given every three hours, and a purgative draught immediately.

It would be superfluous, and irrelevant to the objects of this essay, to detail at length the daily reports of the symptoms and treatment; it will suffice, for the most part, that the physical signs relating to the circulatory organs, not only in this but other cases, be mentioned, excepting that circumstances of a very interesting nature should occur.

On the second day after admission, the bruit de soufflet had become much more constant, and increased in loudness; its frequency was more than in an inverse ratio to the normal sounds of the heart, as observed when admitted. This change probably had been occasioned by his turning in bed; it still continued most intense below the nipple, diminishing as we departed from this point; in other respects, the phenomena were the same as described when first examined; pulse 100, small and weak.

Feb. 19, five days after admission, a decided improvement was observed; his countenance being clearer; lividity of lips and nose diminished; less tension of the feet and legs; anasarca of thoracic and facial integuments decreased; dyspnœa less distressing; the bronchitis, which had recently supervened on the chronic affection of the lungs, and was so acute in its symptoms, was yielding to the treatment; the respiratory murmur being more distinct in the right, and slightly so in the left, but still very feeble; pulse 86, stronger.

℞ *Calomel*, gr. j;
Powder of ipecacuanha, gr. ss.
To be made into a pill, to be taken every four hours.

℞ *Nitrate of potass*, ʒj;
Tincture of cantharides, ℥ss;
Infusion of juniper berries, ℥vj. M.
An ounce to be taken every four hours.

The following is the report made the 22nd February:—

"The bruit de soufflet this morning, whilst in recumbent posture, is almost inaudible, and both sounds in cardiac region nearly natural, the first possessing more of its natural character than has yet been observed; directly under nipple the bruit de soufflet is slightly audible, elsewhere imperceptible; after walking twice or thrice up the ward, it became very loud and sharp, being confined to the left side of heart; the pulse examined at the same time, beat 100 per minute, was regular, and free from intermission; as soon as he settled into a state of quiescence, the bruit gradually lessened, but did not altogether disappear."

The next morning he died quite suddenly, to the great astonishment of the other patients, having, a short time previous to his death, uttered expressions indicative of a great improvement in his general health.

Autopsy.—No examination of the head or abdomen was permitted. The exterior of the body presented the same appearances of anasarca and lividity noted during life; on the lower extremities several vesications had formed, which, by bursting, had left several extensive, ill-conditioned ulcers. The venous congestion about face, neck, and depending parts of the body, at once attracted our attention. After removing the sternum, the lungs, instead of collapsing, rather protruded; very strong adhesions, apparently of long standing, united the pleura on each side firmly together, so that, in endeavouring to separate them, the structure of the lungs was partially lacerated; the left lung throughout its entire extent was emphysematous; the air-cells so much dilated on its antero-superior superfices as to form large transparent sacs, some nearly equalling in size that of a walnut, evidently originating in the rupture, and coalescence of several minor ones; the right lung was also emphysematous, but not to the same extent; in the bronchial tubes were the evidences of acute inflammation having supervened on a chronic disease of the mucous membrane, also some engorgement of the parenchymatous tissue.

The heart was much larger than natural, nearly double its regular size; the venæ innominatæ, venæ cavæ, and right auricle, were vastly distended with blood, as were also the cardiac veins. The muscular fibres of the right auricle were considerably hypertrophied; the ventricle dilated to double its usual capacity; the thickness of its parietes seemed but little altered; the right auriculo-ventricular valves and those of the pulmonary artery presented nothing remarkable; it seemed, however, as if disease were commencing in the first-mentioned, since there appeared to be protuberances on, or situated near, the free edge of the valve; the left auricle and ventricle had also undergone the process of dilatation, with slight increase in the size of their muscular fibres; the auriculo-ventricular opening remained permanently patulous, as the process of "contraction" had engaged at least three-fourths of the valves, so that the parts thus affected scarcely exceeded the one-eighth of an inch in breadth; their edges also had a wrinkled and warty appearance; the tendinous cords were shortened; the fleshy column, to which the healthy portion of valve was attached, nearly doubled the size of the others; the valves and coats of the aorta were quite healthy.

There are some particulars connected with this case interesting and worthy of notice,

which may be stated in the following order:—First, the intermission in the bruit de soufflet; second, its being present with the first sound; third, the pathological condition of the heart, harmonising in many respects with the physical signs heard during life; fourth, the inferences which may be deduced therefrom relative to the sounds of this organ.

Although the heart was frequently stethoscopised, and its action found at one trial free, almost normal, at other times obscured by a loud bellows sound, yet at no period did this phenomenon vary in being connected with the first sound; evincing, in a striking manner, that, however perplexing it might be to form a conjecture as to its probable cause, some degree of certainty might be entertained as to the integrity of the second sound. How far the presence of the "bellows murmur" can be satisfactorily accounted for by the condition of the valves and the left auriculo-ventricular aperture, must remain open for discussion; but, I believe, it may be stated, without fear of contradiction, that in the contraction of a portion of the valvular apparatus, in the thickening of its margins, and in the protuberances on its surface, exists a sufficiency of disease which may be assigned as the indubitable cause of its presence. Can we, in like manner, attribute to any known cause, or account for its absence in a manner just as satisfactory? Can we, by taking a retrospective glance at the physical signs present during life, and the pathological appearances just described, carefully comparing and poising them in the same balance, declare that this is a point which can be disposed of with the same facility? Certainly not. Nor is it reasonable to suppose, nay, it is quite impossible to conceive, that those valves so diseased as to account for the bellows murmur at one moment, could in the next have undergone such an alteration in their structure, position, and action, as to explain its total absence: remember, too, it could be produced at will, rendered more loud, and made to reappear by the patient's stirring in bed, walking about, or by desiring him to perform certain acts. Further on we must return to this subject.

It requires not a very accurate degree of pathological knowledge to trace an obvious affinity between the disease of the auriculo-ventricular opening here, and that of the aortic aperture first described by Dr. Corrigan in a paper published in the "Edinburgh Medical Journal," to pass any comment on which is quite uncalled for; it having obtained, from the first periodicals of the day, praises which are scarcely adequate to its merits; a better name than "permanent patency" cannot be applied to it; a name which Dr. Elliotson also has given to a diseased condition of this opening, differing essentially in its pathology. M. Bouillaud, in his admirable work on Diseases of the Heart, describes a dilatation of the openings, and an insufficiency of the valves to close them; and Dr. Williams, in one of his lectures published in the "London Medical Gazette," notices a similar disease; but the writer is not aware of any author who has published cases of valvular disease, with a permanently patulous state of the apertures, precisely similar in their pathological appearances to those about to be mentioned.

The connection between the bellows murmur and sounds of the heart had better be postponed till the particulars of several other cases have been stated.

UNUSUAL EFFECTS OF CONTINUED CONSTIPATION.

To the Editor of THE LANCET.

SIR:—As I consider the following case highly interesting and instructive, I feel it my duty to transmit it to you for insertion in your Journal. I send it as recorded in the notes and remarks made during the time of my attendance. I remain, Sir, your obedient servant,

ALFRED LOED.

Islington, July 10, 1841.

April 13, 1841. I was called this night, at half-past eleven, to see W. F. L., ætat. 19, who had just arrived at Staple-inn, from the country, where he had held the situation of an assistant in a classical academy. His most urgent symptom was violent spasm of the muscles of the upper part of the trunk, for which I prescribed a sedative mixture, leaving his case for more full investigation next morning.

14. I found him this morning up and dressed; he had passed a tolerable night; his countenance was florid, but not flushed; eye bright; pupil contracted; face indicating no emaciation; the body and limbs muscular, and even fat; chest pigeon-shaped; ribs flattened on left side, over region of the heart; he still suffers, though in a less degree, from spasmodic action of the diaphragm and muscles of the back and chest; pulse 70 to 80, regular; tongue (last night) moist, and slightly coated with a brown fur; dyspeptic. He has constantly vomited blood in large quantities, and also passed the same by stool, and with his urine, and been subject to frequent epistaxis: has slight cough, with expectoration tinged with blood; breath very short; there exists great tenderness to the touch under both clavicles, and over the region of the heart; respiratory murmur at upper part of left lung dull; perspiration at night occasional, but not profuse. The bowels previous to his illness were habitually constipated. He informs me that he has frequently had diarrhœa during his illness, which has been checked by anodynes; and that when he has taken purgatives his motions have been relaxed, but mixed with

lumps of fæcal matter. He complains of a sense of fulness, and can bear no pressure over the abdomen, which is tumid, and very hard; appetite slight; takes only arrow-root.

I remember that I attended him three years since, when from his symptoms, and the fact that his mother died from phthisis, I came to the conclusion that he would very probably, at some remote period, also prove consumptive. I remarked at that time the peculiar development of the ends of the bones, and all those symptoms which denote the absence of a due portion of earthy particles in the osseous system, as well as a want of firmness and tonicity in the other solids. He informed me this morning that he has been, during the last several months, under the treatment of three surgeons successively, of whom the last in attendance called in a physician, resident in the town, who attended him during the three weeks preceding his visit to London. I also received this morning a letter from this physician, conveying to me, in a very courteous and unreserved manner, an account of the case, and the treatment to which his patient had been subjected. He spoke of the case as one of "great peculiarity," and was inclined to think that there existed "serious organic lesion, both in the stomach and one of the large intestines," as well as "some morbid affection of the phrenic nerve and par vagum." This opinion was deduced from the discharges of blood and convulsive action of the muscles of the trunk. His treatment consisted in the occasional administration of purgatives, in the use of the acetate of lead with the extract of opium, and the application of leeches and blisters. I must in justice beg particular attention to one part of his letter, where he stated that, owing to the shy and eccentric habits of his patient, neither himself nor his usual medical attendant could ever see any of the discharges.

I give the following remarks as they stand in my original notes. Here the most striking symptom is the hæmorrhagic tendency, blood being constantly discharged from five outlets, the stomach, bowels, nose, lungs, and kidneys, or bladder. This may form a part of that general laxity of system to which I alluded as having existed three years since; still there must be some other circumstance to bring this tendency into operation, and one must be found consistent with the other symptoms. It cannot be phthisis, as all other symptoms of an advanced stage of this disease are absent. The hæmorrhage is too general to be the result of any organic lesion. Is it not obstruction? Then, where the seat, and what the nature of that obstruction? Does it not consist in constipation of the bowels? And do not the tumid state and tenderness of the abdomen, the frequent diarrhœa, and the passing of solid fæces after purgatives, favour this opinion? Is not the proper secretion from the exhalents of the mucous surfaces thus prevented, and the circulation interrupted, every organ gorged? And does not nature seek to remedy this by the occasional exudation of blood throughout the whole mucous track? And may not the spasmodic action be caused by the consequent irritation of the sympathetic, pneumogastric, and phrenic nerves? It appears to me to be not only probable, but certain; I have, therefore, to feel my way. Ordered a tablespoonful of castor-oil to be taken, and repeated if necessary; and the evacuations to be kept for my inspection, determining to be guided by them, as to the propriety of administering further purgatives.

15. Has passed a good night; suffered little from pain or spasm; took yesterday an ounce and a half of castor-oil, which caused the expulsion of a great quantity of fæcal matter, of which there was at least one pound of scybala, of the circumference of a small orange, and three or four inches in length, of a dark colour, and most offensive smell, and mixed with a small quantity of blood. The abdomen is considerably less tumid; considerable pain and distention at the commencement of the descending colon; breath not so short. To take the same quantity of castor-oil, and to throw up the rectum a quart of warm water.

16. Feels to-day much better; has lost the sense of fulness, of which he so much complained; pain and distention of colon less; breathing improved; has expectorated a little blood; convulsive action only occasional and slight; appetite good; pulse and tongue as before. Has used the injection and taken the oil, and discharged about a pint of fæcal matter, semifluid, evidently scybala, broken up by the injection and oil; a considerable portion consisting of the inner skins of oranges and seeds of figs, which he supposes were eaten a month since: not so dark or offensive as yesterday. Oil and injection to be repeated.

17. Has passed about the same quantity of fæcal matter as yesterday, and of a similar quality, though of a lighter colour; abdomen much less tumid, especially in region of descending colon; has had very slight return of the convulsive action; no discharge of blood; sleeps well; appetite good. To continue oil and injection.

18. Still improving; very little pain and spasm; bowels acted several times; motions watery and light-coloured, containing no blood; slight expectoration of blood; urine turbid; tenderness over the chest still exists. He walked a mile yesterday.

℞ *Tincture of digitalis*, ℥j;
Nitrate of potass, ℥j;
Dilute sulphuric acid, ℥ss;
Infusion of roses, ℥vj. M.
A sixth part three times a-day, with a teaspoonful of salts, as often as required.

19. Complains more to-day of pain and spasm, perhaps induced by walking four miles yesterday, and eating too full a meal. He informs me that he has not been able to walk a mile for the last six weeks till yesterday; and that till he came to town he could not eat more than two or three mouthfuls without stopping, the food appearing to go no further than the chest; bowels acted freely; motions watery; pulse 60; tongue cleaner. I went with him to-day to see him take a vapour-bath; the temperature was very gradually increased, lest hæmoptysis should be produced: whilst in the bath perspired profusely, and when he left it was free from pain and spasm.

20. Bowels acted three times; last motion copious, consisting of very dark-green feculent matter, taking the form of the rectum, but very hard; has had slight expectoration of blood this morning; says he has spit blood for the last three years almost every morning; urine copious and less turbid; abdomen much reduced in bulk, and softened; slight tenderness and considerable fulness in situation of arch of colon, and in the right hypochondriac region. To continue the mixture, with a little gentian, and one of the following pills with each dose:—

℞ *Calomel*, gr. ½;
Compound extract of colocynth, gr. iij;
Oil of peppermint, mj.

21. Improving in every respect; no hæmoptysis; passed a surprising quantity of dark feculent matter, partly scybalous; urine clear. To continue pills and mixture.

22. Has had several motions of dark feculent matter; last night two or three tablespoonfuls of blood were suddenly voided by the mouth, but not in the act of coughing; has directed my attention to a pulsation in the epigastric region, very sensible both to the touch and sight. To take two pills three times a-day.

23. Slight hæmoptysis; pulsation less distinct; has passed *an almost incredible quantity* of dark fæces, mixed with the skin of pears, which he says he ate a month since. To continue pills, with blue pill instead of calomel.

24. Has passed a great number of watery evacuations, perfectly free from scybala, but mixed with fæcal matter, and containing, for the first time, *bile*; has very severe pain in the right hypochondriac and iliac regions. Fearing the effects of hypercatharsis, I have directed six leeches to be applied, to be followed by an opium poultice.

25. Quite free from pain; bowels acted four times without medicine; motions relaxed, not watery, and of good colour.

26. No pain, spasm, or hæmoptysis; bowels acted freely without medicine; apparently quite well.

28. Each day since I saw him has passed five motions without medicine, caused, I imagine, by the free secretion of bile, to the stimulus of which the bowels appear to have been so long unaccustomed. I this day discontinued my attendance. In the course of a fortnight he passed about a hundred motions.

On the 29th he called upon me, and said he had that day walked nine miles. A short time after he returned to the country. The last report received from him bore date 27th of May, when he stated that he was in possession of better health than he had had for some years past.

I think my professional brethren will consider me justified in concluding that the hæmorrhage was produced by obstruction consequent upon constipation; the convulsive action by irritation of the sympathetic, pneumogastric, and phrenic nerves; and the extreme shortness of breath by the thrusting up of the diaphragm, thereby diminishing the cavity of the chest.

I communicated to the physician lately in attendance the result of the case, and my opinions thereon, who agreed with me in every respect, excepting that he could not but imagine there must be some structural lesion, from which the hæmorrhage had occurred, not only whilst the patient was under his care, but also on other and frequent occasions.

PHRENOLOGIC MENSURATION.

At a meeting of the Phrenological Association in London, June 3, 1841, Mr. John Isaac Hawkins, of Judd-place West, New-road, read a paper "On Measuring and Recording the Phrenological Development of the Head."

He stated that on reading Forster's work on Phrenology, twenty-six years ago, he determined to test the science by accurate measurements of the head; and he has diligently sought, ever since that time, for the best methods of measuring and laying down on paper various dimensions and curvatures over each organ of the brain.

He exhibited to the meeting several instruments, which he had progressively contrived and employed; and he pointed out the defects of many of them, in order to prevent others wasting time and money in going over the same costly ground that he had found unfruitful.

He exemplified the deficiency of the common calliper, and showed that it was not practicable by its means to obtain the distance of any medial organ from a line passing through the orifices of the ears, and consequently it was not sufficiently exact for ascertaining the proportionate development of the superior, anterior, and posterior portions of the head; without a knowledge of which proportions, no sound phrenological judgment could be formed.

Mr. Hawkins exhibited as his last and best production, being both effective and cheap, a craniometer, consisting of a metal tube about six inches long, and a quarter of an inch inner diameter, to be laid horizontally across the top of the head: into each end of which horizontal tube, a tube three inches long slides, and against the end of each of the sliding tubes is firmly fixed a vertical tube two inches long, open at both ends, and about an eighth of an inch internal diameter. Through the vertical tubes two wires slide, each seven inches long, having about an inch of the lower end bent at right angles to the remaining six inches of its length, the shorter of the two arms of the wire being terminated by an ivory ball a quarter of an inch in diameter. In order to keep the two balls in a line pointing towards each other, a groove is cut along the back of each sliding wire, and an elastic tongue is formed in the vertical tube to press into the groove, and serve the double purpose of a guide to prevent the wire turning around, and of a spring to allow of easy sliding motion, without liability of slipping with its own weight.

In using this instrument for taking the altitude of the head above the line passing through the orifices of the ears, the ivory balls are placed in the ears, and the horizontal tubes slidden down upon the vertical wires until the middle part touches the top of the head. The balls are then taken out of the ears, which the sliding of the horizontal tubes allows of being easily done, the instrument is laid down on a table, and the distance from the horizontal tube to the centres of the balls measured with a rule, or the wires may be graduated to show the measurement on inspection. By a similar application to the front or back of the head, the respective distances from the line may be obtained.

Mr. Hawkins did not recommend this craniometer as a substitute for the common calliper, for taking the distances of any two accessible points, for which purpose the common calliper is rather more convenient.

For taking curvatures, he showed a wire, from one-tenth to one-eighth of an inch diameter, made of pure grain tin, which is so pliable that it takes the form of any curve over which it is pressed, and by reason of its freedom from elasticity, retains the figure with sufficient firmness to be taken off the head and laid down on paper, where it may be held by laying a stick across the two ends, while a pencil is passed around inside the wire to delineate the curvature of the part measured.

He also exhibited a very simple instrument, by means of which curves may be taken upon paper immediately from a skull or cast held down upon the paper.

This instrument consists of a circular piece or disc of wood, about three inches diameter, and an inch thick in the middle, but thinned off to half an inch at the circumference, one side being flat. Near the circumference a metal tube, one inch long and one-sixth of an inch diameter, is fixed, perpendicular to and even with the flat side of the disc, but projecting from the uneven side; through this tube a short bit of pencil slides freely, and is pressed with force enough to mark on paper, by a spiral spring placed tightly on the tube, and bearing on the end of the pencil.

From the middle of the uneven side of the disc arises, perpendicular to the flat side, a cylindrical stem, five inches long and five-eighths of an inch diameter, having a groove along its whole length on the side towards the pencil: upon this stem a spring socket slides, carrying an arm projecting at right angles from the stem; the extremity of which arm is formed into a knife-edge figure: this edge is always in a line with the axis of the pencil, being guided by a tongue sliding in the longitudinal groove of the stem.

It is obvious that the knife-edge end of the arm being passed around any part of a skull or cast held down upon paper, while the flat face of the disc is passed over the surface of the paper, the pencil will mark the outline passed over by the tracing arm.

Mr. Hawkins exhibited diagrams of two heads of active-minded persons, which he had measured at different periods; from which it was seen that one head had grown three-eighths of an inch in height in twenty-four years, between the ages of thirty and fifty-four; and the same head had acquired an eighth of an inch of additional height in fifteen years, from the ages of fifty-four to sixty-nine. The other head had gained near a quarter of an inch in height in twelve years, from the ages of fifty-five to sixty-seven.

Mr. Hawkins concluded with offering to communicate, gratuitously, the results of his experience to any young man who would undertake the manufacture of these instruments for sale.

Mr. Deville recommended a flat tin strap, about three-eighths of an inch wide, and a twentieth of an inch thick, as preferable to the wire.

OBSERVATIONS ON THE RESULT OF VARICOSE OPERATIONS.

By Charles Clay, Surgeon, Manchester, Lecturer on Medical Jurisprudence.

In The Lancet of August, 1840, I directed the attention of the medical profession to the new operation, first proposed by M. Laugier, for the cure of varicose veins so prevalent amongst females.

In that communication I gave a case in which I had added some little improvements to the original, as recommended and prac-

tised by Laugier. In The Lancet of October following, I made some further observations, with a second illustrative case; and I recorded a third confirming the same views in your Journal of December in the same year, since which time other opportunities have occurred enabling me to test the value of this operation more satisfactorily, from which I feel justified in concluding that it will be found a very valuable operation, fully realising all that can be expected from it. It is necessary, however, that the merits of this operation should be tested more generally by the profession, before it can be received as the best means of relief in such cases; it is with a view that it may become more generally known, and its merits more freely tested, that I make these additional remarks to my former papers. I have now operated in fourteen cases, in four of which I have had to operate on both legs; and when it is considered that two or three distinct operations have to be performed upon every leg so affected, it follows, then, that I have in the whole practised this operation near fifty times. Why I state this particularly, is to show how little is to be apprehended from the operation, as I have not had a single instance where any serious symptoms have arisen from inflammation of the veins, although I have performed it under the worst possible circumstances of constitution and age, also during every kind of weather, yet the whole have progressed well (at least with one or two exceptions I shall hereafter allude to), varying as to the time of complete recovery, according to circumstances connected with the constitution or previous habits of the patient.

Many as are the advantages of this operation, I wish to report those cases where, although they cannot be styled successful, yet the patients have been so far benefitted that the reader will conclude with me, that neither of them disprove the value of the means employed, when it is considered that out of fourteen cases two only were met with that did not fully realise the expectation, it must be allowed to be a very small proportion, and, in point of number, would have little weight against its general adoption, particularly, as I have before stated, when it can be shown that both the cases alluded to derived considerable benefit.

The first of these was a female, pregnant of the fifth child, having to stand ten hours daily at her employment in a cotton factory, of high temperature, and subjected to brutal treatment from her husband almost every day, with scarcely sufficient food, yet under all these very unfavourable circumstances the leg operated upon got well; but in about four months after, in consequence of violent kicks received from her husband on the same leg, the veins became again varicosed, but not in the immediate vicinity where the operations had been previously performed; but so far was she satisfied with the benefit she had derived from the operation, that she is quite willing to submit to a renewal of it on those veins now varicosed.

The second case, like the first, was miserably poor, and, therefore, destitute of comforts arising from good food and clothing, in addition to which she was fifty-six years of age, and had had eleven children; the varicose state of the veins had left the leg, but in consequence of one of the operations being too near the malleolus externus, a small portion of the bone got injured by the caustic, and an awkward sore followed, which is now slowly healing. Thus I have faithfully stated all the disadvantages that have arisen in fourteen cases and near fifty operations. A few observations resulting from the series of operations above-mentioned may not be out of place here. I find females bear the operation extremely well; indeed, as far as itself is concerned it is a mere trifle: the slow action of the Vienna paste afterwards requires both patience and determination. In young and healthy habits the sores will be quite healed in three weeks; but in those of advanced age, debilitated constitutions, and stinted means of subsistence, it will take four or five weeks. There will always be a tendency to inflammation along the course of the vein; but as I have stated before, no serious attack of that kind has been observed in my experience; all the inflammatory action I have met with easily gave way to emollient fomentations, with proper attention to the bowels, and rest. It is necessary to caution the operator not to make the incisions near the bones, avoiding particularly the malleolus externus and internus and the edge of the tibia; if the operation is in a properly-selected part, it is sure to do well; but the more muscular the better, and the less the tendons are interfered with the more satisfactory will be the result. I have always selected the most distended trunks of the veins for the incision, and where they have approached nearest the surface. The morning after the operation I remove all the Vienna paste I can from the wound, taking especial care not to disturb the portion next to the vein, and which has been in active operation; from the removal of the extra paste, the entire treatment consists in emollient dressings, poultices, fomentations, &c., with attention to the bowels. In some irritable habits, I have had occasion to give an opiate after the operation.

In nearly all the cases I have had to treat there existed previously foul-conditioned and long-standing ulcers, which have rapidly healed, very many of them, before the cicatrix of the operation has been formed.

In all the cases, with the exceptions mentioned in this communication, there has been no tendency to any return of the disease, although some are ten or twelve months ago; from this I am pretty confident the relief by

operation may be esteemed permanent; and that it is sufficiently successful to merit further confidence is, I think, evident from the cases I have here written upon.

REMARKABLE CASE OF ILEUS,

FROM A CORD-LIKE PROLONGATION OF OMENTUM STRANGULATING A PORTION OF ILEUM OVER WHICH IT PASSED; DEATH FOLLOWED IN FORTY HOURS.

To the Editor of THE LANCET.

SIR:—I beg to transmit to you the following interesting case which recently came under my care, and should you deem it of sufficient importance to merit publicity through the medium of your widely-extended and truly valuable Periodical, you will oblige me by its early insertion. I am, Sir, your most obedient servant,

ROBERT MURRAY.

Edinburgh, July 13, 1841.

Mrs. Morris, ætat. 57, but from her very attenuated form and careworn visage appeared, at least, ten years older, of melancholic temperament, and *costive* habit, has given birth to nine children; three years ago had a violent attack of ileus, which obstinately resisted the most powerful enemata and other remedial means then employed for its relief. The medical attendants had given her up as a hopeless case, when, much to their astonishment, and no less so to the joy and satisfaction of her friends, the bowels opened *spontaneously* in the evening of the fourth day from the invasion of the attacks. Her convalescence was tardy and imperfect, and ever since she has, from time to time, suffered from repeated paroxysms of colic, more especially if she neglected taking aperient medicine, which she required to do, at least, thrice in the week. Soon after breakfast on the 30th of May last, symptoms of ileus again began to manifest themselves; these, however, were thought lightly of at first, but towards night they set in with augmented severity. Belonging to the humbler class of society, her friends did not seek medical assistance, until the disease had got thirty hours in advance; in the interim a dose of castor-oil was administered (her bowels had not been open for three days), which, however, was rejected as soon as swallowed. On the following day, at three, P.M., I was summoned to attend her. I found the poor creature in great bodily agony, and in a state of complete collapse; the pulse was gone at the wrist, and the heart's action extremely feeble; the temperature of the whole body was also much below the natural standard. The other symptoms were, stercoraceous vomiting, recurring at intervals of two or three minutes; acute pain of the abdomen, particularly a little to the right of the umbilical region; it was, however, relieved to a certain extent by pressure; the countenance indicated great suffering and anxiety; the eye appeared dull and glassy; the tongue was parched and covered with a brown fur, and the thirst insatiable; the respirations very hurried, and hiccup had commenced. From these symptoms, I at first suspected the woman to be labouring under strangulated hernia; I accordingly examined those regions where hernia usually occurs, but could not perceive the smallest trace of swelling or pain in either of them. I ordered the following plan of treatment:—An enema composed of

Oil of turpentine, ℥j;
Tincture of opium, ʒj;
Thin gruel, ℥j.

To be thrown up the rectum immediately, and repeated (omitting the laudanum) every hour, until full and free evacuations were obtained; cloths wrung out of warm turpentine to be applied to the abdomen, and bottles of hot water to the feet.

I saw her again in three hours, slight reaction had taken place; the pulse could be indistinctly felt at the wrist, small, intermitting, and thready. All the other symptoms were aggravated; the pain in the abdomen—now tympanitic—was excruciating and incessant, and very tender upon pressure. Neither of the injections could be thrown up, for, on attempting to do so, they returned instantly. Seeing that the case was utterly hopeless, and in order to render the scene less distressing, I ordered,

Calomel, gr. ij;
Opium, gr. j.

To be taken every hour. Twelve leeches to the abdomen. She got rapidly worse, and at two the next morning sunk.

Post-mortem Appearances.—Having obtained the friends' consent to make an examination of the abdomen and its contents, I proceeded to examine them thirty hours after death. The abdomen was much distended, and emitted a dull sound by percussion. On exposing the peritoneum investing the abdominal parietes, it was found to be a little more vascular than natural; the great omentum presented a similar appearance. Endeavouring to raise the latter, for the purpose of examining the small intestines, a powerful resistance was met with at its inferior margin and to the right side. I explored it with the utmost care, and found the resistance to arise from a prolongation of the great omentum, but differing from it in appearance and feel, being round, tendinous, firm, and inelastic. This tendinous-looking cord was given off from the right inferior angle of the omentum, and proceeded downwards and a little outwards, and was reflected over the (right) round ligament of the uterus, about three inches from the internal inguinal ring, where it became continuous with the pelvic portion of peritoneum. This abnormal structure, which

measured in length three inches and two lines, except at its omental extremity, where it was bulbous, and of the thickness of a crow-quill, pressed so tightly on a portion of ileum over which it passed, as to cause strangulation of the gut. So complete was the strangulation, that at the point of stricture, *i. e.* where the tendinous-looking cord passed over, the peritoneal was scored, and the mucous one lacerated; in fact, the gut presented an hour-glass appearance. I removed the strangulating and strangulated parts: with the former I included a piece of omentum, and four inches of the round ligament, with some of the pelvic peritoneum; of the latter I cut out eight inches at the striatum part, and a little way above it the first stage of gangrene had commenced. I have the whole by me, and consider them valuable specimens of morbid anatomy. Various gangrenous blotches were observable on different parts of the small intestines. The mesentery was highly injected with red blood, and several of its glands hypertrophied. The colon, mesocolon, rectum, &c., were normal. Both the stomach and liver presented a healthy appearance. The spleen and its tunics were in a state of induration; its adhesions to the stomach were remarkably strong. Neither kidney was examined. The stomach and intestines were distended with a rice-coloured fluid, mixed with hard fæces. The cavity of the abdomen contained ten ounces of serum.

There can be but one opinion as to the cause of death in this case; viz., internal strangulation. But on a little reflection, a question naturally occurs, whether the tendinous-looking cord which produced the strangulation was congenital, or only a morbid elongation of omentum, the result of previous inflammation? In support of its being congenital, we have the state of the woman's general health, which was, as far as I could gather from her history, never good. She had long been a martyr to indigestion, and from birth of a costive habit. The circumstance of her requiring to have frequent recourse to laxatives, showed that an obstruction of some sort had always existed in the prima via. The absence, too, of any thickening of the peritoneum and adhesions of the intestines, &c., was in favour of its being congenital, with regard to its being only a morbid elongation of peritoneum. In favour of this view, it may be asked, if it were congenital, how could the woman have passed through a long life with but two attacks of ileus? It must be confessed this is difficult to explain; unless we may attribute it to the tendinous-looking cord being more elastic and attenuated formerly than during the last three years. But I leave it for some of your abler correspondents to investigate, assured that the novelty of the case alone will repay investigation.

THE LANCET.

London, Saturday, July 24, 1841.

The anniversary meeting of the *Provincial Medical and Surgical Association* will be held at York on August 3rd; and, among other questions to be discussed, we are glad to learn that Medical Reform and the New Poor-law have a prominent place assigned to them in the Report. The medical reformers of the north should attend the meeting. Mr. Carter will possibly be there; and will, no doubt, be prepared to put certain questions to the *Worcester Council*, relative to the vacillating course which they thought proper to pursue in connection with the London Conference. We hope that they will be able to give satisfactory answers to Mr. Carter's inquiries; or, at any rate, to show that if they really retarded, they intended to promote, the progress of reform, by recalling their delegates, and passing a resolution,—when the time of action had come,—that the Association would "*wait, and see what the Corporations would do!*" What could members of the House of Commons think of such conduct? If the Worcester Council represented the Association, or of any large body of reformers, is it wonderful that the House of Commons was counted out, when it was the interest of the Corporations that medical reform should not be discussed? "Wait," said Mr. Darby, and the advocates of the Colleges, until you see our beautiful emancipation Bill; but "Wait" was the echo of the Worcester resolution; and "We have waited, we are waiting, and we *will wait*," may be reiterated by the same tame schoolboys at York, unless a voice of northern thunder, armed with the indignant energy of an insulted profession, awake them with the war-cry, "We have waited too long, and will wait no longer."

The Council ascribe great credit to themselves for the "caution," and the "cautious measures," which have hitherto paralysed

their proceedings, and have so wofully disappointed the anticipations of their well-wishers. The "caution" has more than once made a fearful approach to cowardice; and it may be curious to inquire, at some future time, into its source; whether it was originally implanted in the Council, or was a result of their migratory habits. All migratory animals are noted for their cautiousness, and their acute sense of danger. There is your cuckoo, for example; he is very "cautious." He has an aversion to cold weather, and long before its approach quits England. He never embarks in the hazardous speculation of building his own nest, or rearing his own offspring, but leaves his mate to lay her eggs in the nests of other birds. Hence he has a great deal of leisure to cry "Cuckoo," and you would imagine that he entertained "great designs;" if he had an articulate organ, he would be, no doubt, found proud of his "caution" in never speculating, in keeping out of sight, and in shunning the northern storms. Your cuckoo is not a falcon, or an eagle. Then there are the migratory swallows; they scream, float about the sky, and catch flies all day long; skimming over the surface of the waters in cloudy weather, but never diving deep; and, with characteristic "caution," practise long on the wing before they follow the retiring sun. We confess that we should have liked the Council none the less if it had displayed less of the migratory "caution." Where powerful monopolies have to be assailed, injustice is to be encountered, and the rights of the oppressed have to be asserted, we want reformers of all weathers—men who are ready to face the pitiless pelting of the storm, or to endure the heat and burthen of the day. The Council will do well to reflect that caution may be carried beyond the bounds of virtue; and that procrastination is not always Fabian policy.

The Council has acquired all the glory it can reap in nine years from the exhibition of caution: their constituents will now be gratified by witnessing a display of determination and vigour. They have not carried out the Southampton resolution. What measures are they prepared to propose or adopt? Will they sanction the principles agreed to by the Conference, and by a majority of their own delegates? They have hitherto done little for the general practitioners of the country. Do they include them in their scheme of reform? Or are they to be thrown overboard, to gratify the College of Surgeons and the College of Physicians? If we are to have different classes of practitioners, how does it happen that none but "pure physicians" have ever been elected Presidents of the Association, or have ever obtained any of the posts of honour at the anniversaries?

The Association may exercise a salutary influence, by taking up matters immediately connected with the honour, as well as with the reform, of the profession; and as many provincial physicians may be assembled at York, they may probably deem it expedient to express their sense of the recent proceedings of the College of Physicians, and of the conduct of the *Licentiate*-Fellows. We have frequently promulgated opinions which were rather calculated to be useful to the Association at large, than grateful (at the moment) to the learned Secretary; but there can be no doubt that Dr. HASTINGS has the success of the Association at heart, and that he would not sacrifice the interests of his fellow-members to mere personal aggrandisement, or accept invidious privileges, which were denied to his brethren. Dr. HASTINGS, Dr. BARLOW, and the leading men in the Association, have virtue enough to reject a *Licentious Fellowship*, or any exclusive title, until it is conceded to them, with all their brethren, by Parliament, or by the relenting Corporations. Provincial physicians must recollect the Committee of London Licentiates, the part which they took in the Parliamentary inquiry, and the petitions which they presented to the House of Commons, declaring the distinction of Fellows and Licentiates to be *illegal*, unjust, and injurious. The subsequent conduct of several of them has been animadverted upon in this Journal, and is well understood. But as the "Medical Gazette," writing under the inspiration of a *Licentious*

Fellow (so we must designate him), has attempted to enshroud a very simple question in mystification, we shall briefly recapitulate the facts; and it will be for the provincial physicians to declare publicly whether they have been well or ill-treated.

The London College of Physicians, while it expressed its determination to maintain the privileged and non-privileged *castes*, offered the Fellowship to a majority of the more active petitioning Licentiates. The offer was refused by a certain number, comprising, as every body must admit, some of the most pure-minded men in the profession; they argued thus:—"No, we cannot accept "the Fellowship for ourselves, while it is "withheld from our brethren in London and "the provinces; we cannot sanction with "our names a distinction which we have "declared illegal, unjust, and injurious, in "petitions presented to the Imperial Parlia-"ment: nor can we give the enemies of "reform occasion to triumph, by making it "appear that we were animated by envy, or "that our long-continued efforts in favour "of medical reform were sustained by selfish-"ness. Open the College liberally to all "English physicians; grant the Fellowship "to all our co-Licentiates; we have de-"manded it for them and for ourselves as a "right; we will not accept it as a bribe or a "favour."

A majority of the petitioning Licentiates (we write it with deep sorrow) yielded to temptation, deserted the camp of reformers, and are now what our contemporary christened *Licentiate*-Fellows, and what we call *Licentious* Fellows. They said, to excuse themselves, that they entered the College to carry the war into the enemy's camp, and to promote the cause of liberality and reform by their votes. This sounded plausibly: their professions were soon put to the test.

Professor WILLIAMS made a distinct proposition to this effect—that the order of Licentiates should be abolished, and that the Licentiates should be made Fellows, possessing as such, in strict conformity with the Acts and Charters, all the rights, privileges, powers, and immunities, of the Corporation. A similar proposition was recently brought forward by Dr. LATHAM and Dr. WATSON, and was supported by Professor KIDD, Dr. SEYMOUR, and other Fellows, having in all (we believe) *eleven* votes. The proposition was negatived by a majority; and by what majority, it may be asked, at York? By the *Licentious* Fellows, who all, excepting *one*, it is said, voted against the liberal proposition. They entered the College to carry out reform measures! If they had voted with Dr. LATHAM, Dr. WATSON, Dr. SEYMOUR, Dr. WILLIAMS, and Dr. KIDD, the degraded order of Licentiates would no longer have existed. The London College of Physicians would have been rendered accessible to all English physicians.

The accuracy of this statement cannot be denied. The way in which the *Licentious* Fellows voted is well known; a sense of shame did not suppress the avowal of their sentiments; they evidently applauded the *great* (!) CHAMBERS, when he declared the attempt to concede privileges to provincial physicians to be "dirty work."

Now, what view the Association may take of this matter at York, we do not pretend to know; it will soon be seen whether Dr. HASTINGS will rise to the height of the occasion, and propose an explicit vote of censure on the *Licentious* Fellows; whether their names will be mentioned in the speeches; whether the provincial physicians will sit down quietly while "dirt" is thrown on them; or whether they will applaud, in a spirited resolution, the conduct of those high-minded Licentiates who stood up for the rights of their brethren by refusing the Fellowship; and the noble conduct of those Fellows who, like their own venerated president, Professor KIDD, generously came forward and offered to abdicate all their long-enjoyed exclusive privileges for the sake of the profession and the public interests.

The writer in the journal referred to makes a curious distinction, and a more curious admission. "It will probably appear that the "question was not whether the Licentiates "and Physicians of England should be ad-

"mitted to the Fellowship of the London "College, but *whether the Fellows of the Lon-* "*don College should be amalgamated into the* "*class of Licentiates, abolishing thus the very* "OBJECT FOR WHICH THE LICENTIATES HAD "BEEN PETITIONING." We did not know that "LICENTIATES" petitioned for no other "object" than admission to the Fellowship.

The organ of the College has the following paragraph relative to Dr. MARSHALL HALL:

"• • The *Licentiate-Fellows*, among whom *we are glad* to see the name of Dr. MARSHALL HALL, the quondam friend of THE LANCET, but from, henceforth, we presume the theme of its weekly abuse, to be hereafter characterised as the bribe-accepting Licentiate, the renegade, the pretended reformer, the betrayer of his brethren, the graceless victim of a Machiavelian policy."

The writer indulges several sneers at the *eleven* "virtuous and high-principled Fellows" who voted for Dr. LATHAM's liberal proposition: something more is meant than meets the eye, he says, when THE LANCET characterises some of the oldest and most respectable members of the College of Physicians as "virtuous and high-principled Fellows!" And pray why? Has THE LANCET ever refused the homage of its praise to any class of sincere reformers? Would that we could apply the same epithets to all the Fellows of the College, without violating the truth and independence of the Medical Press. It would relieve us from an onerous task, and painful duties. We have applauded the exertions of Dr. MARSHALL HALL, the Reformer; what we shall have to say of Dr. MARSHALL HALL, the *Licentiate*-Fellow, time must determine. It will not be, his friends would fain hope,

> Hei mihi, qualis erat! quantum mutatus ab illo
> HECTORE, qui redit exuvias indutus Achillis
> Vel Danaûm Phrygios jaculatus puppibus ignes!

We believe that he has acted conscientiously, and that he will be one of the first to renew in the College Dr. LATHAM's defeated proposal. At the same time our disapproval of the policy, expressed six years ago, and often reiterated since, is not diminished. We warned Dr. MARSHALL HALL. We told him, a few weeks back, that he stood upon the edge of a precipice: and can only account for the dreadful plunge, on the physiological principle adverted to by our great poet:—

> • • "When the mountains rear
> Their peaks beneath your human foot, and there
> You look down o'er the PRECIPICE, and drear
> The gulf or rock yawns—you can't gaze a minute
> WITHOUT AN AWFUL WISH TO PLUNGE WITHIN IT."

The "toys of desperation" have wrought their worst effect; the victim has precipitated himself from the height; and if the vital spirit of liberty have not left him bruised on the ensanguined rock, he must beat about in the surges of the sea that "roars beneath," whirled in that fatal vortex, and scarcely able to raise his head above the waters, at long intervals, to hail the glorious bark of Reform as it sails to a secure haven.

Practical Illustrations of the Treatment of Obstructions in the Urethra and other Canals by the Dilatation of Fluid Pressure. Also an Essay on the various Modes of Removing Urinary Calculus. By JAMES ARNOTT, M.D. London: Churchill.

THE principle of dilating strictures of the urethra by fluid pressure was laid before the profession by Dr. Arnott, some years since, at which period it was introduced by M. Ducamp into the French practice. But it would appear that in the French capital the plan was not properly applied, and consequently fell into disuse, or was only employed when it was deemed desirable to apply nitrate of silver to the surface of a stricture; a practice of a very dangerous tendency, and one long discarded from the mind of the scientific surgeon of this country. At the present day, the dilatation of strictures by the metallic bougie, curved like the catheter, and gradually increasing in size from a very small to a very large diameter, is the most approved and general practice. By this method, judiciously pursued, the most obstinate strictures may, in the course of a moderate period, be safely and surely cured. But it must be admitted that the conditions of adroit manipulation, patience and perseverance, are absolutely necessary. There is no place in the treatment of stricture, for the sleight-of-hand jugglery that whirls the bougie with lightning velocity, and buries its point somewhere or other in the cellular tissue of the inter-fascial region of the perineum: a convenient pioneer to urinous infiltration into

the perineum and scrotum,—a dismal forerunner of fistula in ano, irritative fever, sphacelus, and—"*post-mortem appearances.*" The operation must be performed carefully, cautiously, judiciously; the patient must be respected, and the *show-off* reserved for some more fitting occasion. It is scarcely to the point here to indulge in an episode upon the proper treatment of stricture, but we feel called upon in this place, as well as on every occasion that may present itself, to denounce those mischievous and dangerous weapons,—pliable bougies, wax bougies, soft bougies, forsooth, and *id genus omne*, used as appliances for the cure of strictures. How often have we seen them drawn from the urethra, bent, compressed, forced into a corkscrew coil, and reeking with the clotted gore of some unhappy victim of bad surgery. The object of the present work is the opposite of all this, the intention of the author is one of benevolence towards mankind, of commiseration for the sufferer; it is to supply to the surgeon a means of distending the contracted portion of the urethra without pain or danger, or of dilating the canal for the purpose of holding communication with the bladder in the extraction of calculi of a moderate size. The only question that raises itself with regard to Dr. Arnott's method is, What are the advantages, if any, which the present plan offers over that already in use? To the purpose of answering this question the work before us is dedicated, and we feel that we should be doing great injustice to the author, to attempt a reply by quoting the few extracts which the limits of our Journal will permit. The volume abounds in sound sense and excellent practical information, and deserves to be read attentively, as well as to occupy a place in the library of every practical surgeon. We will endeavour to give our readers an idea, though one which must necessarily be feeble and imperfect, of the merits of the treatise, by placing before them such of the paragraphs as appear to us to convey important instruction. In reference to recent improvements made in the dilating instruments, Dr. Arnott observes,—

"Amongst the principal alterations that have occurred to me in the construction and use of the fluid dilator, since the publication of the following cases, are the employment of a screw for the piston rod of the syringe, and the injecting of a proportion of viscid gummy liquid with the air. By the expedient of the screw, the patient is enabled himself to regulate the pressure of the fluid with the greatest ease and nicely according to his sensations, and to increase it, until the distended membranous part of the instrument (which, in the larger sizes, consists of a strong woven silk tube) becomes as hard as a cylinder of wood. By leaving the instrument thus in the hands of the patient, with directions to keep it perfectly motionless in the canal, and to cause only as much pressure as can be borne without pain, *I have succeeded in effecting as much dilatation in a few hours, as can be made by the usual mode of boring through a succession of strictures in as many weeks or months*, without the irritation that is excited by such repeated passing and repassing of instruments through sensitive parts, and without the hazard that accompanies the necessary forward motion of bougies, sounds, or other wedge-acting instruments in the process of dilatation. By the injection of thick mucilage, it is of less consequence that the material of which the instrument is made should be perfectly impermeable to fluid, for this oozes through small openings so slowly as scarcely to affect the dilatation, especially if there be a considerable quantity of it used. In cases where irritation would oppose the continuance of dilatation, a mucilage of an anodyne quality may be employed."

With regard to the application of the principle of dilatation to the distention of the urethra for the treatment of calculus, the author observes,—

"I am glad to have the opportunity of bringing again into circulation, as it was originally published, the Essay on Calculus, which I have shown, in the appendix to the late edition of my work on strictures, was the source of the inquiries in France that terminated in the substitution of safer and less painful measures for the operation of lithotomy. I am pleased, also, to have such an opportunity of showing that the defects of the present operation of lithotrity, which are now bringing it into discredit, except in a limited number of cases, were anticipated in this essay; and that the French committed an error in directing their attention exclusively to the means of mechanically reducing the size of the stone, and neglecting the expedient to which, in my opinion, this ought to be only subservient. That gradual and easy dilatation of the male urethra, effected by the equable and controllable action of fluid pressure, instead of the very imperfect steel dilators which have been substituted for it, will be found the safest means of extracting stone, I have very little doubt, unless such an operation be superseded in many cases by the mode suggested at the same time, of dissolving the stone by an exceedingly weak solvent running constantly through the bladder, by

means of a double catheter. The trial which Sir Benjamin Brodie made of this plan was successful so far as it went, notwithstanding the imperfect apparatus then employed, and his success is highly encouraging to further investigation of the subject."

Of the treatment, or, rather, of the maltreatment, of strictures by means of caustic, Dr. Arnott remarks in his introduction :—

"Of the various plans that have been employed for the removal of stricture of the urethra, that of stretching or dilating it by an instrument passed through it, has always had the preference as a general remedy, being more safe in its operation than the others, and less painful to the patient. It is true that the method of destroying stricture by caustic, after being particularly brought into notice about thirty years ago by Mr. John Hunter, for opening a passage through strictures impervious to the bougie, was afterwards for a time extended to strictures of every description, by his relative and successor, Sir Everard Home, and others, because of the quicker and more permanent cures frequently made by it, even in ordinary cases, than could be effected by the instruments of dilatation then known; but caustic has again, as a general remedy, been totally relinquished, from the experienced difficulty of confining its action to the stricture alone, and from the severe pain, irritation, and danger, occasioned when this is not accomplished."

This work contains numerous illustrations of the application and results of this mode of treatment in the form of cases, in which the dilating process was not merely confined to the urethra, but was also extended to contractions of the rectum; and it concludes by an essay on "stone in the bladder; being a criticism on the present methods of operating; an account of new securities against several of the dangers of these; the description of a new method of injecting for the solution of stone, and the history of a case of a common-sized stone extracted by means of the dilator, without cutting the bladder."

We shall conclude our notice of this work by the detail of a case in which the dilator was employed, for the removal of a stone from the bladder; and we again most warmly recommend the volume for its ingenious views and sound practical observation to the attention of the profession :—

"A gentleman, beyond middle age, had been operated upon in the usual manner for stone in the bladder. Owing to the extreme fragility of one of several stones that existed, it broke in the extraction, and it was not until after three successive searchings, with an interval of about a week between each, that the bladder was supposed to be cleared of the fragments. Another unfortunate circumstance happened in the operation, which was, that the rectum was wounded. The wound of the rectum had continued in a fistulous state ever since, being a period of nine months, fæces occasionally passing by the urethra, and urine by the rectum. Some weeks after the operation, a severe irritation of the bladder arose, and the urine was sometimes expelled by painful spasmodic contractions of the bladder, at other times it dribbled involuntarily off by the fistulous opening. Various expedients were resorted to for the cure of the fistula, but in vain; and in this state he came to London, where he was under the joint care of Mr. Astley Cooper and Dr. Arnott. With a view to the cure of the fistulous communication between the urethra and rectum, Mr. Cooper made an opening into the urethra from the perineum, close to the commencement of the fistula, and by this opening he introduced a female catheter into the bladder, which, remaining in the bladder, and preventing its painful contractions, soon materially allayed the irritation. Upon then sounding the bladder a stone was discovered; and, as it was likely to be small, but a short time having elapsed since lithotomy had been performed, Mr. Cooper was willing to try the effect of the new dilator, in opening the passage for its removal. Two of these instruments were accordingly constructed for the purpose, under my direction. The distensible tube in both was about six inches in length; the diameter in one somewhat more than half an inch, in the other nearly three-fourths: and the distensible tube was tied upon a silver canula, with both ends open, for the free exit of the urine. The smaller dilator being introduced in place of the female catheter, it was inflated as far as the patient's feelings would permit; and, as the sense of distention abated, I injected more air, generally after intervals of two hours. The larger instrument was substituted for the first, about twenty hours after its introduction, and eight hours after it had been dilated to its full extent. The passage was dilated to the size of the larger dilator in about six hours, and this instrument remained in the part till the forceps was introduced. During the dilatation the patient had an uneasy feeling of distention, but not amounting to what is usually termed pain: he was feverish, and his sleep at night was frequently interrupted; but these circumstances may be as justly attributed to the anxiety he felt about the issue of a new operation on his own person, as to the irritation from the distention. The urine flowed constantly through the open tube.

"In extracting the stone, Mr. Cooper employed the common forceps; and, in all respects, except that there was no director

used in its introduction, as in the usual lateral operation. The stone was a flattened oval, and of about the size of a walnut."

Advice to Young Married Women, and those who have the Management of the Lying-in-Room, upon the General Treatment of Females during Pregnancy and Confinement. By JOSEPH CURTIS, Surgeon. Second Edition. Smallfield.

The Young Nurse's Guide, or Instructions upon the General Management of the Sick. By JOSEPH CURTIS, Surgeon. Masters.

BOTH of the little works before us are dedicated to the wants of the sick-room, and both contain much valuable instruction upon the subjects on which they treat. The former is intended by the author to be made subservient to the wants of "females in the humbler walks of life," and is, therefore, adapted to that purpose both in style and in price; and the latter is equally intended to take its share in a humble sphere of usefulness.

We are induced to extract a paragraph from the preface to the "Young Nurse's Guide," from being much pleased with the good and kindly feeling which it breathes; and in parting with the little volumes we must bestow on them our recommendation, as promising much useful information in a humble, though not the less important, branch of medicine:—

"Many persons accustomed to sickness," says Mr. Curtis, "may feel inclined to laugh at the simplicity of some of the author's observations; but it must be recollected that he has written for the benefit of novices, and has not thought it beneath him to enter into any details by means of which he might relieve the perplexity of their situation."

UNIVERSITY OF LONDON.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.

July, 1841.

Eighty candidates presented themselves at this examination. The following is a list, alphabetically arranged in two divisions, of those who passed:—

First Division.

Ballard, Edward, University College.
Beaumont, Henry, University College.
Davies, John Jones, London Hospital.
Davis, John Hall, University College.
Fearnside, Henry, University College.
Fox, Joseph John, University College.
Francis, Dayrell Joseph Thackwell, Guy's Hospital.
Garrod, Alfred Baring, University College.
Gull, William Withey, Guy's Hospital.
Hadwen, Arthur, University College.
Hudson, John, Leeds, and University College.
Humble, William Edward, University College.
Jacob, Henry Long, University College.
Jenner, William, University College.
Inman, Thomas, King's College.
Johnson, George, King's College.
Leonard, Thomas, University College.
Letheby, Henry, Aldersgate.
Matthew, Thomas Patrick, University College.
Parker, Nicholas, London Hospital.
Raper, William Augustus, University College.
Savage, Henry, University College.
Stedman, Silas Stilwell, University College.
Swayne, Joseph Griffiths, Bristol Medical School.
Tapson, Alfred Joseph, University College.
Topham, John, University College.

Second Division.

Blake, James, University College.
Blomfield, Thomas Alfred, University College.
Bunce, Richard, Bristol Medical School.
Evans, John, University College.
Francis, Charles Richard, Middlesex Hospital.
Graham, Thomas, Middlesex Hospital.
Hearne, Edwin, University College.
Heath, George Yeoman, University College.
Jones, Evan Burnell, Webb-street.
Jones, Thomas Lloyd, University College.
Langmore, John Charles, London Hospital.
Martin, Joseph Telford, Royal College of Surgeons in Ireland.
Maynard, Thomas Brooke Elliot, Bristol Medical School.
Meryon, Edward, University College.
Mott, Charles, Webb-street.
Noyes, Henry George, Guy's Hospital.
Padley, George, Guy's Hospital.
Paley, William, London Hospital.
Randall, John, Aldersgate.
Smith, Henry, St. Bartholomew's Hospital.
Staples, Charles Theodore, Military Hospital at Ceylon, and University College.
Stiff, William Phillimore, University College.
Wayte, Charles Matthew, Bristol Medical School.
Williams, William Henry, University College.

Examiners { J. F. DANIELL. F. KIERNAN. J. S. HENSLOW. JON. PEREIRA. W. SHARPEY.

At the late B.A. Examinations for Honours, Samuel Newth, B.A., obtained a certificate

in Mathematics and Natural Philosophy, and Samuel Coulter Davison, B.A., in Classics. Both these gentlemen are of University College.

Eighty-nine candidates entered their names for this examination; nine withdrew before, and five during the examination: twenty-six were placed in the first division, twenty-four in the second, and twenty-five did not pass.

Thursday, July 15.—*Morning*, 10 *to* 1.

ANATOMY AND PHYSIOLOGY.

Examiners, Mr. KIERNAN and Professor SHARPEY.

Candidates may illustrate their answers by sketching the parts they describe.

1. The muscles of the back of the neck, the sterno-cleido-mastoidei and the vertebral column being removed from the head, describe the posterior surface of the pharynx, and the parts which lie between the pharynx and the inner surface of the ramus of the jaw, as far as the last molar tooth. The pharynx being opened at its posterior part and in its whole length, describe the parts brought into view; the description to include that of the posterior nares, the soft palate, its arches, muscles, vessels, and nerves, the tonsils, the isthmus faucium, the dorsum of the tongue, its glands and papillæ, the epiglottis and its folds, the superior aperture of the larynx and its posterior surface.

2. Give an account of the several structures which enter into the formation of the skin. The answer to include a description of the glands of the skin, but not the hairs or nails.

Afternoon, 3 *to* 6.

1. Commencing the dissection at the integuments, and continuing it to the anterior surface of the vertebral column, describe the parts successively met with in a portion of the neck bounded below by the upper part of the sternum and the first pair of ribs, above by a line drawn across the lower part of the cricoid cartilage, and on the sides by lines corresponding to the external margins of the scaleni antici muscles.

2. Describe the intimate structure of secreting glands in general, and the varieties in the intimate structure observed in different glands of the human body, giving the evidence on which any opinions you may state are founded.

The examiners reported to the senate that nine candidates presented themselves at this examination, and that the following are arranged according to their proficiency:—

Edward Ballard, University College.
Thomas Patrick Matthew, University College.
Alfred Joseph Tapson, University College.
Silas Stilwell Stedman, University College.
Thomas Inman, King's College.
John Jones Davies, London Hospital.
Joseph John Fox, University College.
Joseph Griffiths Swayne, Bristol Medical School.

They also reported that Edward Ballard evinced sufficient merit to entitle him to the exhibition of 30*l*. per annum for the next two years, and to a gold medal; and that Thomas Patrick Matthew evinced sufficient merit to entitle him to a gold medal.

Friday, July 16.—*Morning*, 10 *to* 1.

CHEMISTRY.

Examiner, Professor DANIELL.

1. According to the atomic doctrine, is there any, and what, connection between the atoms of bodies, and the heat and electricity which they contain?

2. Describe and explain the construction and action of Harris's unit-jar.

3. Describe and explain the construction and action of Saxton's magneto-electric machine.

4. Supposing a portion of fused chloride of lead, and an aqueous solution of sulphate of soda, to be exposed to the electrolytic force of the same voltaic current, what would be the products of their decomposition, and what proportions would they bear to each other?

5. Taking the composition of cane-sugar to be $C_{12}\,H_{11}\,O_{11}$, how must it become modified before it can be susceptible of the vinous fermentation? and what will be the products of such fermentation?

6. I have weighed a tube, containing an organic substance without nitrogen, to be analysed, and found its weight to be 51·610 grains: having emptied it, I again weighed it, and found the weight of the tube to be 48·400 grains.

The substance thus transferred was mixed with oxide of copper, exposed to heat, and the products collected in the usual way.

Before the experiment, Liebig's potash-apparatus weighed 453·284 grains; afterwards, 458·223 grains.

Before the experiment, the chloride of calcium tube weighed 174·000 grains; afterwards, 175·870 grains.

What were the proportions of the elementary constituents of the substance analysed? What the number of the equivalents of each? What was the substance analysed?

7. State and illustrate Berzelius's doctrine of ammonium.

8. What is benzule? What is its connection with the volatile oil of bitter almonds and benzoic acid?

9. Explain the formation of hydrocyanic acid in the bitter almond.

The examiner reported to the senate that four candidates presented themselves for honours in chemistry, and that they are arranged according to their proficiency:—

Edward Ballard, University College.
Joseph John Fox, University College.
Thomas Inman, King's College.
W. E. Humble, University College.

The examiner also reported that Edward Ballard had evinced sufficient merit to entitle him to receive the exhibition of 30*l.* per annum for the next two years, and a gold medal; and that Joseph John Fox had evinced sufficient merit to entitle him to a gold medal.

Friday, July 16.—*Afternoon*, 3 *to* 6.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

Examiner, Dr. Pereira.

1. What is the per-centage strength of the *acidum hydrocyanicum dilutum*, Ph. L.? What quantity of cyanide of silver should 100 grs. of this acid yield on the addition of a solution of nitrate of silver? State the characteristics of cyanide of silver, and how you would distinguish it from chloride of silver. If a sample of diluted hydrocyanic acid yield a red precipitate on the addition of the iodo-cyanide of potassium and mercury, what inference would you draw therefrom? State the composition of this red precipitate, and explain the chemical changes which occur during its formation under the above circumstances.

2. The bottles marked respectively A and B contain adulterated powder of scammony; you are required to apply the appropriate tests (*which will be furnished*) in order to discover the nature of the adulterating matter in each.

3. Describe the mode of preparing the *spiritus ætheris nitrici*, Ph. L.; and explain the nature of the principal changes which occur during the process. What is the composition of this spirit? To what contaminating matter or matters do you ascribe the property usually possessed by the spirit of nitric ether of the shops, of becoming olive-coloured on the addition of protosulphate of iron, and blue with tincture of guaiacum?

4. State what are the symptoms caused by a poisonous dose of hydrocyanic acid, and what remedial means you would have immediate recourse to in order to avert death. Describe the *post-mortem* appearances when this poison proves fatal. How would you proceed to detect its presence in the contents of the alimentary canal? Explain the nature of the chemical changes which occur on the addition of the several tests.

5. By what chemical test is the flour of white mustard seed distinguished from that of black mustard seed?

6. Describe the effects, uses, modes of administering, and doses of *digitalis*.

7. You are required to name the four barks labelled respectively C, D, E, and F.

8. Describe, in botanical language, *conium maculatum*, pointing out those characters by which it is distinguished from neighbouring species.

The examiner reported to the senate that four candidates presented themselves for honours at this examination, and that he had arranged them in the following order, according to their proficiency:—

Thomas Inman, King's College.
John Jones Davies, London Hospital.
Alfred Joseph Tapson, University College.
William Edward Humble, University College.

The examiners also reported that Thomas Inman had evinced sufficient merit to entitle him to the exhibition of 30*l.* per annum for the next two years, and to a gold medal; and that John Jones Davies had evinced sufficient merit to entitle him to a gold medal.

The reports were presented by the examiners, and the exhibitions and medals awarded by the senate on Wednesday.

UNIVERSITY COLLEGE HOSPITAL.

RUPTURE OF THE BLADDER FROM RETENTION OF URINE.

J. D., aged 70, was admitted on May 17, under the care of Mr. Liston. He came into the hospital at ten, A.M., on account of a slight transverse wound of the throat, which he had made with the intention of destroying himself. He assigned as a reason for this proceeding, that he had not passed any water since the 14th, although several attempts had been made to pass the catheter by a surgeon. On examination, Mr. Taylor, the house-surgeon, found the bladder greatly distended, and reaching nearly to the navel, with extreme pain on pressure; but the pain was restricted, or nearly so, to the hypogastrium. On farther inquiry it appeared that he had had stricture for several years, but had never before experienced a complete stoppage. Mr. Taylor immediately passed a No. 5 catheter, and met with a stricture three or four inches from the orifice; from eight to nine ounces of turbid urine followed. The pain and tenderness, however, continued without any relief, and at four, P.M., it was first remarked that there was increased fulness of the hypogastrium, with tension and acute pain on pressure extending to the general surface and sides of the abdomen. Eighteen leeches were ordered to the hypogastrium, to be followed by hot fomentations; and as the bowels had been confined, ten grains of calomel, followed

by half an ounce of castor-oil, were administered.

7, P.M. The swelling and tension not at all relieved; tenderness somewhat increased; pulse full, 110; great thirst. He was bled to twenty ounces, and a fresh supply of leeches were ordered to the abdomen: five grains of calomel and five grains of Dover's powder every four hours.

May 18. Passed a restless night; has vomited some bilious matter this morning; pain and tenderness much aggravated, and patient's appearance greatly altered; is affected with clammy sweats; his respiration is hurried, and there is loud sonorous rattle over the whole chest. Bowels were freely opened during the night.

9, P.M. As little urine had been observed to pass since the introduction of the catheter, that instrument was again introduced. Not a drop of urine followed.

19. Patient is rapidly sinking, is quite unconscious. Died at five, P.M.

After-death Appearances.

The examination was made twenty-four hours after death.

Abdomen.—The parietal portion of peritoneum anteriorly in a state of intense inflammation, being nearly of a black hue; this appearance extended above the umbilicus. Considerable effusion of dark and turgid serum into the cavity, having no ammoniacal smell. Intestines, omentum, and mesentery, also much injured. On displaying the bladder, which was contracted, its serous covering was found intensely inflamed and adherent posteriorly to the rectum. On removing the serous tunic, the cellular tissue around and beneath was found to be infiltrated with bloody serum, having a strongly-urinous odour; the cellular membrane broke down readily under the fingers.

The infiltration has extended throughout the pelvis, reaching nearly to the kidneys. The whole of the urinary organs were now removed, together with the symphysis pubis.

As rupture of the bladder was evident, air was forced into it by the ureter, and found to escape at the back part where the serous coat was bulged out into a pouch. On laying it open, about two ounces of thick urine, and a small calculus about the size of a peppercorn, escaped. The mucous membrane was pale, but much sacculated, forming several small cysts between the fasciculated muscular coat. Posteriorly there was a round sloughy patch of the size of a shilling, communicating by a small aperture with the external cellular membrane, which was also in a sloughy state. The neck of the bladder presented a fringe of warty caruncles over the uvula. There was slight enlargement of the middle lobe of the prostate. On laying open the urethra, at the situation of the stricture, there was found to be a warty thickening of the mucous membrane about an inch in extent. The kidneys were pale and flabby, with a slight appearance of granular degeneration.

Thorax.—The lungs were congested posteriorly, with signs of intense bronchitis.

Heart enlarged and flaccid, with ossific deposit at the base of the mitral and aortic valves.

**** REPLY TO THE STRICTURES OF E. S. ON A CASE OF DISLOCATION OF THE WRIST.

A writer in this Journal of a fortnight since, under the initials of E. S., has advanced some rather curious opinions respecting the diagnosis of a case of dislocation of the wrist, reported to have occurred at University College Hospital. The case was not seen by the reporter of this Journal until after the dislocation had been reduced and the arm placed in splints, but the signs of the injury were carefully and accurately described to him by Mr. Liston's house-surgeon, Mr. Taylor, a gentleman well known in the hospital, to have most worthily obtained his appointment by having stood the mental trial, and who is fully capable of distinguishing the nature of the accident. E. S. raises three principal objections to the accuracy of the diagnosis given: the first consists of his assertion, that no precedent had occurred in the practice of French surgeons, *therefore* it was not likely to occur *here*. Surely this objection requires no answer! If any were necessary, the mention of the characteristic signs of the injury by all English surgical authors would be sufficient.

The second objection is, the presumption that the dislocation might, in reality, have been fracture. Why, this is surely shallow enough, for with a fracture of the opposite radius before him, and which was easily distinguished, the surgeon had a guide not likely to mislead him. With regard to the suspicion of E. S. being confirmed by the circumstance of splints having been applied to the dislocated wrist, we would merely direct his attention to the following injunction of the first British surgeon on this point. Mr. Liston remarks, "Mere reduction is not sufficient, retentive apparatus must be applied; as soon as the limb has been made straight, a pasteboard splint is to be applied on each side, as in fracture of the forearm."—*Reporter*, LANCET.

KING'S COLLEGE HOSPITAL.

GANGRENE OF THE LUNG.—USE OF CHLORIDE OF LIME.

J. MURPHY, aged thirty, an Irish labourer, who had but lately arrived in London, and had experienced great privations, was admitted on the 16th of December, 1840, into Sutherland Ward, under the care of Dr. Todd. The patient stated that he had two

attacks of fever two years back, since which time he has been healthy, until nine weeks ago. He was then attacked with a short cough, and on one occasion expectorated some blood. The cough was increased by a cold, caught after throwing off a flannel, which he was in the habit of wearing, and by working in a draught of cold air. At this time he began to spit some pellets of green matter, and has continued to do so ever since. About a week ago he says he spat up as much as three pints of light-coloured blood, and since that time has continued to spit up smaller quantities daily.

He is much enfeebled by the loss of blood; his face and lips are pale, exsanguine, and of a leaden hue: he has constant cough, but the respiration is not difficult. He complains of soreness in his chest; he says he is much emaciated since his illness commenced; tongue pale and moist; complains of thirst; appetite good; pulse 80, small; bowels open. One grain of acetate of lead and a quarter of a grain of opium, to be taken in the form of a pill, every four hours.

On the following day he was first seen by Dr. Todd. He continues to expectorate large quantities of blood, with much thick tenacious mucus. Auscultation indicated a fulness of respiration on the right side, without any modification of voice or cough. His pulse is 80, small; *there is extreme fœtor of the breath.* This symptom led Dr. Todd at once to suspect incipient gangrene of the lung, although the physical signs did not very precisely indicate its seat. He was cupped on the chest to six ounces, and was ordered one-sixth of a grain of tartar emetic every four hours.

18. Cough worse; passed a very bad night, owing to the violence of the cough; expectorates a large quantity of frothy mucus mixed with blood. The fœtor of the breath is extremely great. To have a draught consisting of half a drachm of liquor of chloride of lime; nine drachms of camphor mixture; and one drachm of simple syrup, every six hours. The tartarised antimony to be omitted. He was directed likewise to inhale from the solution of chloride of lime.

19. Cough continues very troublesome, with abundant expectoration of blood, and a dirty, fœtid mucus. The fœtor of the breath has been considerably corrected by the chloride of lime and the chlorine inhalations, and now is not perceived in ordinary respiration, but becomes very perceptible whenever the patient coughs. Pulse 120, small; respirations 24; lies on his back or left side; complains of a weight in the chest behind the sternum, but is free from pain. In the supra and infra-spinal fossa of the right side, some gurgling and tubular breathing is heard; neither voice nor cough are altered; bowels slightly relaxed. To have the following draught every six hours:—One drachm of solution of chloride of lime; nine drachms of camphor mixture; simple syrup, a drachm; and twelve minims of tincture of opium. To have six ounces of wine and a chop daily.

22. Cough very troublesome; fœtor of breath much less; expectoration the same, both as to quantity and quality, but is very fœtid; pulse 84; tongue moist and clean; appetite good; sweats profusely towards the morning. Dr. Todd now gave the diagnosis, a gangrenous cavity in the inferior part of the upper, or in the middle lobe of the right lung, consequent upon a pulmonary apoplexy.

27. The sweats are colliquative. Three days ago he spat blood again: he looks very pale and haggard. The chlorine does not seem to correct the fœtor of his breath, which is now most offensive to all who come near his bed, and occasionally to the other patients in the ward: the expectoration has assumed a dirty-yellow colour, as if it were mixed with pus, and is very fœtid. Posteriorly on the right side, in the scapular region, gurgling is heard during inspiration, and a blowing during respiration; there is a slight bronchophony; pulse 100; great weakness and emaciation; face hippocratic; a pint of porter daily.

Jan. 5. Diarrhœa supervened six days ago, which is very profuse, and has resisted the usual astringent remedies. Expectoration purulent; breath very fœtid.

10. The continuance of the profuse sweats, copious expectoration, and colliquative diarrhœa, completely exhausted him, and he died this morning.

Upon examination, it was found that two cavities existed in the lungs; one in the centre of the middle lobe, nearer to its posterior than its anterior surface, and the other in the lower part of the superior lobe: the fissure was obliterated by lymph, which glued the two lobes together. Each cavity contained a black, fœtid slough, with some dirty purulent matter. The pulmonary substance, for a little distance around each cavity, was in the state of grey hepatisation. In the left lung there was a spot of grey hepatisation, corresponding exactly in situation to that of the superior cavity of the right lung.

Dr. Todd remarked, that the order of the morbid processes appeared to have been, first, a chronic inflammatory condition either of the bronchial membrane or of the pulmonary tissue; secondly, pulmonary apoplexy, as evinced by the copious hæmoptysis; and thirdly, gangrene of the lung. The treatment by chloride of lime was adopted in conformity with a suggestion first proposed by Dr. Stokes; and it was so far successful as to remove for a time, to a great extent, the offensive fœtor of the breath,

which constituted at once the most distressing and the most characteristic feature of the disease.

ST. GEORGE'S HOSPITAL.

CASE OF RUPTURE OF THE INTESTINE OCCURRING DURING THE TAXIS EMPLOYED FOR THE REDUCTION OF AN INCARCERATED HERNIA.

Elizabeth Rivett, ætat. 55, admitted June 16, 1841, under the care of Dr. Wilson, with palpitation, loss of appetite, and other dyspeptic symptoms: these were relieved by hydrocyanic acid and mild tonics, and she was to have left the hospital upon Wednesday, the 7th of July.

On Sunday, the 4th inst., at ten, A.M., she requested the house-surgeon, Mr. Lee, to reduce a left femoral hernia, which had resisted her own attempts during the previous hour. She was placed immediately in a warm bath, when, without any immoderate pressure, the bowel appeared to return with a gurgling noise into the abdomen. Not many minutes had elapsed before she began to complain of pain over the whole abdominal region; her face became flushed, and her pulse greatly accelerated, indicating about 90.

At two, P.M., Mr. Cæsar Hawkins saw her, and found a small hernia, about the size of a walnut, in the left femoral region, and also an umbilical hernia. When touched neither appeared tense or more painful than the other part of the abdomen, which was acutely sensible to pressure. She complained of some retching and nausea, but had not brought anything off her stomach. Pulse 100, somewhat sharp. In order to ascertain for certain whether the bowel was or was not obstructed in the sac, she was ordered eight grains of calomel, to be taken immediately, and an injection, containing an ounce of castor-oil, in three pints of decoction of barley. Half an ounce of castor-oil, with four drops of tincture of opium, to be administered two hours after the preceding remedies, if necessary.

Six, P.M. Only a small part of the injection had come away. She still suffers great pain over the whole abdomen. Pulse 120, more sharp. Bleeding to ten ounces, not buffed or cupped; calomel, two grains; powder of opium, one-sixth of a grain: to be taken every two hours.

Ten, P.M. Has taken two powders without a relief from the bowels; very restless and anxious; pulse reduced to 110, by the bleeding. Calomel, ten grains: to be taken immediately. Eighteen leeches to the abdomen.

July 5. The severity of the pain had entirely prevented sleep; countenance pallid, and bedewed with perspiration; the bowels have not yet been open; great pain and distention of the abdomen; the sac in the femoral region not tense, but apparently containing air; much worse.

One, P.M. At a consultation of the surgeons an operation was resolved upon, in order to examine the state of the bowel.

Operation, half-past one, P.M. Mr. Hawkins made a longitudinal incision over the tumour, and the hernial sac was exposed by dissection: this was found to be considerably thickened. A small opening was made in the sac, when about four ounces of peritoneal fluid with some air escaped. Nothing was found in it. A hernia-knife was now used to divide the seat of the stricture, and the finger introduced into the abdominal cavity; immediately, air and fæces followed their withdrawal. The case was now no longer doubtful; a piece of oiled lint was placed in the wound, and the patient left to her fate, or to the slight chance of recovering with an artificial anus after the operation. The symptoms not being relieved, died at eleven, P.M. Some fæces escaped from the wound.

Post-mortem Appearances Thirteen Hours after Death.—Body well-developed.

Thorax.—Lungs perfectly healthy; pericardium and heart without any perceptible signs of disease.

Abdomen.—Upon opening this cavity, the parietal and visceral peritoneum was found to be very vascular. The convolutions of the intestines were glued together by recently-effused lymph. Posteriorly the intestines were in contact with a large quantity of fæcal fluid; and here a much greater degree of vascularity was observed than elsewhere. The fæcal fluid, after minute examination, was found to have exuded out of a circular opening in the ileum: its edges were round, and an ulcer had evidently been formed some time previously to her death in this spot. The opening did not correspond, by an inch or two, with the strictured portion of the sac. At the lower part of the abdomen lymph had been effused, so as to form a kind of pouch, in which fæcal fluid, the residue of that which escaped during the operation, was contained. The other organs were not examined. It is probable that if the ruptured portion of the intestine had remained, as is sometimes the case, in the sac, the operation might have been attended with more success; but as it was, the retraction of the intestine after the reduction caused a general diffusion of irritating matter, and thereby nature's efforts to confine the mischief were rendered useless.

TUBAL PREGNANCY

ISSUING SUCCESSFULLY.

A woman, thirty-two years of age, who had borne several children, in the month of May, 1834, suffered from vomiting, and

complained of pains on the right side of the abdomen in the region of the ovary. In this situation she perceived a tumour, which was small at first, but in six weeks became as large as the head of a child. The pain extended along the back and the right thigh, and soon became so severe as to deprive her entirely of sleep. There was constipation, fever, thirst, and subsequently jaundice, with slight infiltration of the skin.

M. de Ritzen was called in, at about six weeks after the commencement of the pains. The woman believed herself to be pregnant, in consequence of the cessation of menstruation and from other signs.

The tumour was at this time exceedingly large; slight pressure increased the pain, but greater pressure caused it to cease. The right side of her person was more œdematous than the left; the right pupil was more contracted and smaller than the left, and the whole of the right side affected with a general sensation of uneasiness. The liver was normal, pulse quick, skin hot and dry, thirst considerable, tongue covered with a yellowish coating, appetite bad.

On examining the uterus through the vagina, the orifice was found towards the left side, the lower lip being enlarged. Through the cul-de-sac of the vagina on the right side he felt a tumour immediately above the uterus, of which he could easily feel the movement, when pressure was made in the right groin. On examining the tumour through the rectum, it was found to be a little larger in this situation. For three months no discharge had taken place through the vagina. Her bowels were at first opened every four days by means of clysters and saline purgatives; but at the end of twelve days there was complete constipation, and the transverse colon might be felt distended through the abdominal parietes.

By these signs it was presumed to be a case of tubal pregnancy, and auscultation rendered this diagnosis still more positive, discovering a bellows sound at the same instant with the pulsation of the arteries. The tumour now seemed likely to burst; a narcotic emollient poultice was therefore applied, and a seton made a little to one side. With the intention of promoting premature delivery, a dose of salts was prescribed, and subsequently pills composed of ergot of rye and extract of aloes. In twenty-four hours the pains in the tumour ceased, and on the third day the patient was able to sleep. The pills had at first produced vomiting, and subsequently contractions in the tumour and in the uterus; the patient expelling through the vagina some blood of a deep colour, and in twelve hours her bowels were moved. After this, large clots of blood were discharged, which were found to be composed of flocculent tissue like decayed membrane, and afterwards part of the chorion was found, but nothing which indicated the presence of an embryo.

On the fourth day the tumour had considerably diminished, but did not disappear altogether till after about a year and a half. During nine months she was subject to frequent discharges of blood. The bellows sound began to diminish immediately after the treatment, and disappeared completely in three weeks. The ergot of rye and aloes were administered for three days, and the Epsom salts during eight days: the seton was retained for several months. The woman is now well, and has not again become pregnant.

UVULA-SNIPPING FOR STAMMERING.

To the Editor of THE LANCET.

SIR:—Seeing by the last number of your Journal that Mr. Yearsley *still persists* in the success of *his* operation for stammering, I beg to inclose you the result of two cases in this town, operated upon by Mr. Y.

Mr. B., an inspector of police, *suffered* the *excision* of his tonsils and uvula by Mr. Yearsley some two or three months since, he having been subject to stammering for many years, attended with most disagreeable contortions of his features (protrusion of the tongue, &c.) in the act of speaking. Mr. Yearsley *at once* operated on him, and *kindly* "let him off" for the moderate fee of 2*l.* 2*s.*, owing to his father being a surgeon in the navy. He returned to Chelmsford in a few days; and I confess my expectations were raised to the highest pitch for the result, it being such a confirmed case, and one (if cured) likely to enlist a great many advocates in this quarter in favour of the operation; but what has been the result? He has not received the *slightest benefit*, but, on the contrary, thinks himself *worse* since the operation, and grieves very much that he ever submitted to what he calls a "*butchering experiment!*"

The second case is that of Mr. L., a relieving officer, a native of this place. He was also operated on by Mr. Yearsley, and certainly felt much benefit during the time that inflammatory action was going on (*which was most severe*), consequent on the operation; but now that all that has subsided, his improvement has been very little indeed, I myself being in the habit of conversing with him daily. And now, sir, as I am on the subject of stammering, I beg to mention a case operated on in this town, by Mr. Gibson, surgeon, at which I was present.

John Hicks, a railroad labourer, a confirmed stammerer from childhood, presented himself about nine weeks since, and wished to try his chance of a cure at the expense of losing his uvula. He being a fair case, as

we thought, for *drawling*, having the uvula very much elongated, and filled with serous infiltration, Mr. G. applied the curved scissors, and brought away the uvula, and, to our great delight and astonishment, John Hicks spoke most fluently and *most incessantly* in a few seconds afterwards, making us for the *time-being* most *sanguine admirers* of Mr. Yearsley's stammering propensities; but our delight was soon turned into disappointment, for John Hicks called a few days afterwards to leave a *lasting impression* on our minds of *as bad a case of stammering* as I ever heard. Thus much, sir, for the success of Mr. Y's. *operations* in this town; and hoping you will give insertion to this for the benefit of Messrs. Yearsley and Poett, I am, Sir, your very obedient servant,

W. B. M. Egan, Surgeon.

Chelmsford, July 19, 1841.

OPERATIONS FOR STAMMERING.

Mr. Yearsley has forwarded to our Publisher an advertisement for insertion on the cover of The Lancet, having reference to the remarks which have appeared in this Journal upon his progress and proceedings as an operator in a popular line of business. We desire to take no advantage whatever of Mr. Yearsley, which is not based upon *facts*, and we stand on this question quite as much before the tribunal of the public for judgment as does Mr. Yearsley himself. With a disposition to do all possible justice to that gentleman, we voluntarily copy into this place the advertisement on the wrapper to which we refer, in order that the comment of its author, and the statements of his critics, may be always found in the same volume:—

"To the Readers of The Lancet.

"Can I be expected to continue a controversy with the whole herd of stammering schoolmasters and the Editor of the Lancet into the bargain? The odds are too great; neither is the field a fair one, as may be seen by referring to "Notices to Correspondents" of the last three or four weeks. I therefore "bide my time," when I trust I shall prove I have neither unnecessarily maimed my patients, misrepresented facts, nor deluded myself. For the present I must content myself with affirming, that I have cured many cases of stammering by surgical means alone, and shall continue to do so when it be associated with disorganisation of the throat.

"James Yearsley.

"21, Sackville-street, July 20, 1841."

NAVAL ASSISTANT-SURGEONS.

To the Editor of The Lancet.

Sir:—I rely on your sense of justice to insert a few words in reply to your anonymous correspondent, "A Naval Surgeon of the Old School," who accuses me, in The Lancet of last week, of an attempt to disseminate discontent amongst the naval assistant-surgeons, "who," he says, "have not experience for their guide." I am, Sir, your very obedient servant,

J. Tweddale.

87, St. Martin's-lane, July 8, 1841.

Your correspondent of the old school commences by stating, that from my standing in the service I could only have been a member of the ward-room mess in times of piping peace; in this he is misinformed: and I beg to state that I entered the service in April, 1807, and continued serving the most active period of the war, until its conclusion in June, 1815. Having fortunately passed the greater part of my time, while assistant-surgeon, as a member of a ward-room mess, the contrast I drew between the situation of the army and naval assistants was consequently derived from my own experience, and not from the opinion of my seniors, as no grievance of the kind was ever felt in my own case. In pointing out the disadvantages under which naval assistants still labour—their not being allowed to mess in the ward-room; and this exclusion preventing them from giving their children the benefit of the very best education at the Royal Naval Schools of Richmond and Camberwell, at a small nominal charge, and which has been denied to them because they do not come under the denomination of officers of ward-room rank. In order to prove the correctness of my statements in opposition to that contained in The Lancet of last week, I shall simply send you an extract from the evidence of the inspector-general, given in 1839, before the naval and military commissioners, respecting the situation of assistant-surgeon.

"There has never, as far as has come to my knowledge, been any serious complaint made respecting the full-pay, though the changes and increase which some years ago took place in that of the medical officers of the army, have certainly of late caused dissatisfaction. Even this would not have been received as so great a hardship, if the order in council had not prevented the assistant-surgeon promoted from receiving any benefit from more than three years out of his actual service, though that time had been passed on the coast of Africa (where so many have lately fallen victims), in the West Indies, or any other tropical country. If he had not the good fortune to be promoted, did he receive any more half-pay

than if he had served but three years at home; and, added to all this, he continued to mess with *gentlemen* so much *younger* than himself, where he could never enjoy sufficient *quietude* for *study* to improve himself in his profession, or to keep up that which he had *already acquired*; objects, I must say, of greater importance to the navy than they are generally thought to be, and which would operate in the ships to which he belonged greatly to the advantage of the officers and ships' companies during periods of serious illness, and in the day of battle.

"The remedy for these evils is, in my opinion, to place the medical department of the navy *exactly* on the same footing as that of the *army*; that is, to allow the assistant-surgeon to *mess* in the *ward-room* or *gun-room*, as the case may be: to allow them to enjoy the rank and privileges belonging to a subaltern officer, as given them by the order in council in 1805."

The sentiments of the inspector-general, as expressed before the commissioners, are, I think, fully confirmatory of any opinion I have ventured to advance, as to the necessity of the measure being adopted, and at the same time is a refutation of the serious charge this old officer has advanced against me, of "disseminating discontent" in the minds of the junior class alluded to, and which charge I cannot but think illiberal on the part of your correspondent; inasmuch as he forgets that the pay has been more until last year than that of the lieutenants, his senior officers. As to the charge of their previous habits of smoking and drinking while students, this is so little founded on fact, that it is altogether unworthy of notice, being equally untenable with the idea expressed "of their crude, inexperienced opinions when brought into collision with their superiors and elders, being more likely to make enemies than friends." This, I think, as unlikely to occur to them as to the junior officers of marines, who, it is well known, are mere youths from school, who, on obtaining their commission, are received at once into the ward-room mess.

A gentleman, then, after having completed an expensive medical education of six years' duration, who is about to decide whether he will enter the medical department of the army, navy, or pursue his profession in civil life, on looking at the regulations will have no difficulty in making a decision; but remove this objection, by placing the naval-assistants to mess in the ward-room, his pay being now equal to those of the army since last year, and the whole of his service allowed, the navy would soon become the most popular service. I shall not take any notice of the concluding part of this anonymous letter, leaving it to the profession to form their own opinions.

THE

NAVAL MEDICAL PROFESSION.

To the Editor of THE LANCET.

SIR:—I hope the letter on "the Medical Profession of the Navy," in THE LANCET of the 10th inst., will meet with the attention it merits; but the writer has committed something like an error, which awakens the contrast between the *old* surgeon and the *fortunatis* of July, 1840, &c. He says, "the fourth surgeon, ten years in the service, is on the seven shillings half and twelve shillings full-pay;" when, in fact, *a few days over ten years* will give him fourteen shillings: and some *first* appointments *as surgeons* have recently taken place, where the parties, with not much more than ten years' *total servitude*, and that, of course, *entirely* as *assistant*, are enjoying fourteen shillings per day. Indeed, the full-pay of ten and eleven shillings, and the half-pay of five and six shillings, seem to be reserved entirely for the punishment of old officers who happened to be unemployed on the important 1st of July, 1840; though it admits of proof positive, that a very large number of such officers *could not possibly be employed at that time*. The disparity between the really effective list of surgeons and the ships in commission is such, as to place a great number of the above class of officers unavoidably on half-pay; and had the late commission kept this simple fact in sight, it is difficult to believe that the order, so justly, honestly, and generally complained of, could possibly have been issued.

Let me hope that our respected chief *will fill up* the measure of gratitude so justly due to him from his subordinates, by using his powerful, and doubtless effectual, aid, towards immediately rescinding an order so palpably unjust.

The injustice having been committed by the present administration (I believe entirely from their not clearly comprehending this part of the matter in question), let me hope they will make the *amende honorable*, and not leave the credit of the act to be reaped by their successors. I am, Sir, your humble servant,

AN INVALID, AND ALSO "ONE OF THE ROBBED."

ON THE TREATMENT OF

FRACTURE OF THE THIGH.

(From a Correspondent.)

ON Saturday last, Mr. Gale, of Glastonbury, who, we understand, was formerly a pupil of Guy's Hospital, illustrated, at St. Thomas's, a very ingenious and most effectual plan of securing the immobility of the thigh, in case of fracture, by means of *splints* of plaster of Paris, supported by others of deal. The evident and great advantage of Mr. Gale's plan, is the impossibility of the

fractured portions of the bone being removed from the position in which they shall have been placed by the surgeon with the aid of pulleys. No spasmodic action can displace them, and thus perfect ease to the patient is secured. This state of ease, paramount as it is in importance, is effected, by a passive resistance to the action of the muscles, without the least pressure: added to this, the facility with which the whole apparatus may be removed at a moment's notice, renders it a great desideratum in the treatment of compound as well as simple fractures. Upon the whole it appears a most scientific mode of treating oblique fractures of the thigh, with a certainty of not having a shortened limb, and with the utmost benefit to the health of the sufferer.

Mr. Gale stated that he had had some very successful cases of compound fracture of the thigh; the treatment of which differs from that of simple fractures only in an alteration of the contrivance easily made by means of an aperture in the splints, so as to admit of dressing the wound without disturbing the limb.

July 16, 1841.

VIEWS OF THE CHEMISTS AND DRUGGISTS.

To the Editor of THE LANCET.

SIR:—It is high time that bandying words with chemists and druggists were abandoned by the press and by the members of our profession. If the object be to protect the public from the fatal and meddlesome interference of unqualified persons, and at the same time to protect the vested rights of those who have been at the pains and expense of becoming either physicians, surgeons, or apothecaries, it appears to me that it could be done efficiently by defining, in a broad and intelligible manner, the term "legal or qualified practitioner of medicine or surgery," and also the amount of penal liabilities which an unqualified person shall incur by trespassing on the grounds of medical men.

I cannot help thinking that the Medical Reform Bill would be better off in the hands of some man among whose constituency there may not be many chemists and druggists, rather than in the hands of Mr. Hawes.

Before I conclude, it may not be amiss to say, that when I found among the perspiring geniuses who have placed themselves under the wings of R. H. Pigeon, Esq., the name of my druggist, I at once formed the resolution of not troubling in future so ambitious a personage with the petty catalogue of my wants, and it strikes me very forcibly that my *confrères* would not be doing amiss if they were to act likewise. I am tired of the indignity put upon us by this forced collision with men who ought to know better than to attempt to push their pretensions beyond the bars which education places between them and the profession, whose tradesmen it ought to please them to remain, as it certainly has hitherto profited them to be. Your obedient servant,

MUS CHIRURGIENS DE GREGE RUSTICO.

July 12, 1841.

TO CORRESPONDENTS.

The kindly-expressed letter of *Mr. Robert Dickson* has been received. The peremptory refusal to attend to novel and startling propositions would have prevented the magical inventions of Windsor, Watt, Daguerre, and Talbot, from having existence anywhere but among the temporary wonders of "Gazetteers" and "Gentlemen's Magazines." As to Captain Cox, who ever knew a lunatic avow himself to be otherwise than perfectly sane, and generally with an air of sanity?

Amicus Justitiæ.—It would be useless to publish a complaint of personal ill-treatment which does not contain a single date, name, or address.

The letter of *Mr. Laity* was mislaid. He must attend and give evidence in such a case, and state the facts that he knows, without a fee, but he is not bound by law to express any opinion on those facts, nor to make a post-mortem examination of the body. He may refuse either, with impunity. But even if he expect to be paid, and could legally demand the fee, his claim to it could only be enforced, on possession and presentation of the coroner's summons or order to attend, or examine the body, which is described in the Medical-Witnesses' Act; a verbal direction from either coroner or beadle would be invalid. In reply to the second question, it may be stated that the simple appointment in the navy or army confers no right on a medical practitioner on shore.

G. N. G. was entitled to demand a fee of one guinea a-day.

Dr. W. H. Brown.—No attention would be paid by the profession to an address purporting to come from an association of gentlemen, of which neither the members, the president, the managers, nor, with few exceptions, the address, are named or known beyond the walls of the place of meeting. The parties by whom it has been sent must acknowledge, on reflection, that for all practical purposes it would be a waste of space to print it. Moreover, we believe that at none but a public meeting would it be other than idle to attempt to form a new association with the old objects.

Chirurgi.—1. No; but he would probably do so with impunity. 2. He could not be prosecuted successfully. 3. Not for many years, ten or eleven. 4. It does. 5. Yes.

The formula for the tincture of aconite shall be published next week.

Communications have been received from *Mr. Stevens; Mr. Ross; Mr. Clarke; Mr. Hancorn; A Reformer.*